ORDER NO. MD0403099C1
A6

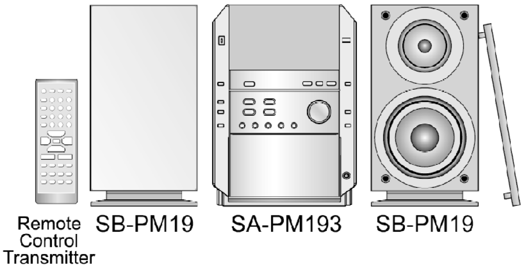
Service Manual

CD Stereo System

COMPACT
disc
DIGITAL AUDIO

SA-PM193P

Colour
(S)... Silver Type


Remote Control Transmitter
SB-PM19
SA-PM193
SB-PM19

SPECIFICATIONS

Specification

■ Amplifier Section

Power output	
10% Total harmonic distortion	
60 Hz - 3 kHz, both channels driven	
(Low channel)	25 W per channel (6 Ω)
3 kHz - 16 kHz, both channels driven	
(High channel)	25 W per channel (6 Ω)
Total Bi-Amp power	50 W per channel
Power output	
10% Total harmonic distortion	
1 kHz, both channels driven	
(Low channel)	30 W per channel (6 Ω)
8 kHz, both channels driven	
(High channel)	30 W per channel (6 Ω)
Total Bi-Amp power	60 W per channel
Output Impedance	
Headphone	16-32 kΩ

■ FM Tuner Section

Frequency range	87.5 - 108.0 MHz (100 kHz steps) 87.9 - 107.9 MHz (200 kHz steps)
Sensitivity	1.5 µV (IHF)
S/N 26 dB	1.5 µV
Antenna terminal(s)	75 Ω (unbalanced)

■ AM Tuner Section

Frequency range	520 - 1710 kHz (10 kHz steps)
Sensitivity	
S/N 20 dB (at 1000 kHz)	560 µV/m

■ Cassette Deck Section

Track system	4 track, 2 channel
Heads	
Record/playback	Solid permalloy head
Erasure	Double gap ferrite head
Motor	DC servo motor
Recording system	AC bias 100 kHz
Erasing system	AC erase 100 kHz
Tape speed	4.8 cm/s
Overall frequency response (+3 to -6 dB at Deck Out)	
Normal (Type I)	35 Hz - 14 kHz
S/N RATIO	45 dB (A weighted)
Wow and flutter	0.10% (WRMS)
Fast forward and rewind times	Approx. 120 seconds with C-60 cassette tape

■ CD Section

Disc

CD, CD-R, CD-RW, MP3	8 cm/12 cm (3-3/20”/4-73/100”)
Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source/ Wavelength	Semiconductor laser / 780 nm
Number of channels	Stereo
Frequency response	20 Hz - 20 kHz (+1, -2dB)
Wow and flutter	Below measurable limit
Digital filter	8 fs
D/A converter	MASH (1 bit DAC)

MP3

Bit rate	32kbps-320kbps
Sampling frequency	32kHz, 44.1kHz, 48kHz

■ General

Power supply	AC 120 V, 60 Hz
Power consumption	130 W
Dimensions (W x H x D)	179 x 250 x 383 mm (7-1/16” x 9-27/32” x 15-3/32”)
Mass	5.24 kg (11.55 lbs.)
Power consumption in standby mode:	0.8W

■ System: SC-PM193P-S	Music Center: SA-PM193P-S Speaker: SB-PM19EG-M

Notes:

1. Specifications are subject to change without notice. / Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.
3. The labels “HIGH (HF)” and “LOW (LF)” on the rear of the speakers refer to High frequency and Low frequency.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. Safety precautions

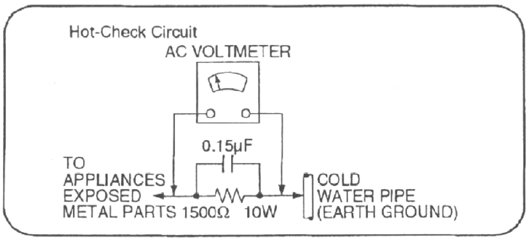
1.1. General guidelines

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. Leakage current cold check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1M Ω and 5.2 Ω . / When the exposed metal does not have a return path to the chassis, the reading must be ∞ .

Fig. 1


Hot-Check Circuit
AC VOLTMETER
0.15μF
TO APPLIANCES EXPOSED METAL PARTS
1500Ω
10W
COLD WATER PIPE (EARTH GROUND)

1.1.2. Leakage current hot check (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5k Ω , 10 watts resistor, in parallel with a 0.15 μ F capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at

each point.

5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and re-checked before it is returned to the customer.

2. Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C506, C507, C508, C584 & C311 through a 10 Ω , 5W resistor to ground.
DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

- Current consumption at AC 120V, 60 Hz in NO SIGNAL mode should be ~300 mA.

3. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.
If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note:
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

4. Handling the Lead-free Solder

4.1. About lead free solder (PbF)

Distinction of PbF P.C.B.:
P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.
Caution:

- Pb free solder has a higher melting point than standard solder;

Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of soldering iron with temperature control, please set it to 700 ± 20°F (370 ± 10°C).

- **Pb free solder will tend to splash when heated too high (about 1100°F/600°C).**
- **When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.**

5. Precaution of Laser Diode

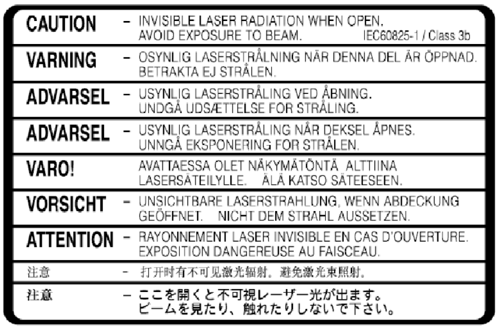
CAUTION:

This unit utilizes a class 1 laser.
Invisible laser radiation is emitted from the optical pickup lens.
When the unit is turned on:

1. **Do not look directly into the pick up lens.**
2. **Do not use optical instruments to look at the pick up lens.**
3. **Do not adjust the preset variable resistor on the pickup lens.**
4. **Do not disassemble the optical pick up unit.**
5. **If the optical pick up is replaced, use the manufacturer’s specified replacement pick up only.**
6. **Use of control or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.**

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN TH
SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.



CAUTION	– INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. IEC60825-1 / Class 3b
VARNING	– OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN.
ADVARSEL	– USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.
ADVARSEL	– USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VARO!	AVATTAESSA OLET NÄKYMÄTÖNTÄ ALTTIINA LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VORSICHT	– UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
ATTENTION	– RAYONNEMENT LASER INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
注意	– 打开时有不可见激光辐射。避免激光束照射。
注意	– ここを開くと不可視レーザー光が出ます。 ビームを見たり、触れたりしないで下さい。

Inside of product

6. Handling Precautions For Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.
So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

- **Handling of CD traverse deck (optical pickup)**

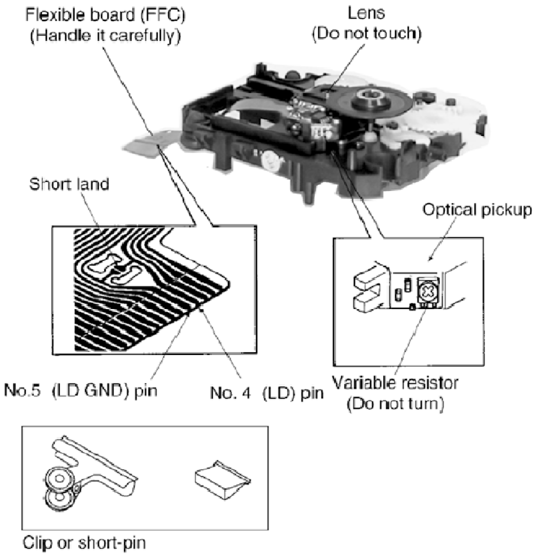
1. Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.

2. The short land between the No.4 (LD) and No.5 (GND) pins on the flexible board (FFC) is shorted with a solder build-up to prevent damage to the laser diode (Fig 1).

3. Take care not to apply excessive stress to the flexible board (FPC board).

4. Do not turn the variable resistor (laser power adjustment). It has already been adjusted.

Fig 1



- **Grounding for electrostatic breakdown prevention**

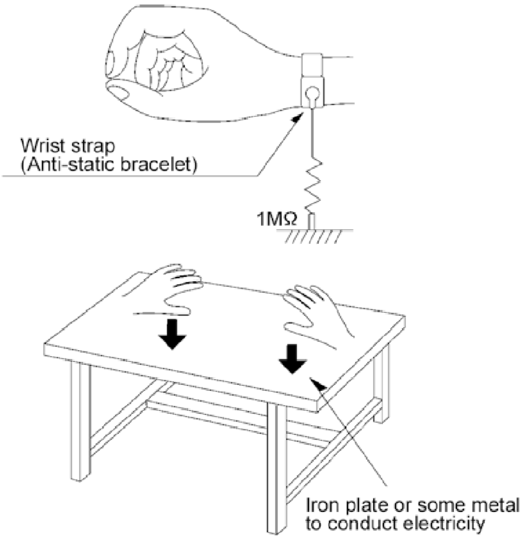
1. Human body grounding (Fig 2)
Use the anti-static wrist strap to discharge the static electricity from your body.

2. Work table grounding (Fig 2)
Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is placed, and ground the sheet.

Caution :

The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).

Fig 2



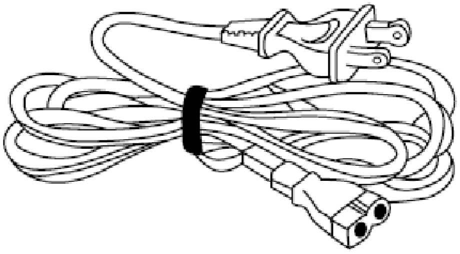
Caution when Replacing the Optical Pickup :

The traverse has a short point shorted with solder to protect the laser diode against electrostatics breakdown. Be sure to remove the solder from the short point before making connections.

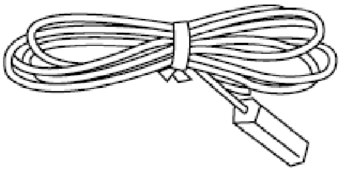
7. Accessories

Note : Refer to Packing Materials & Accessories for part number.

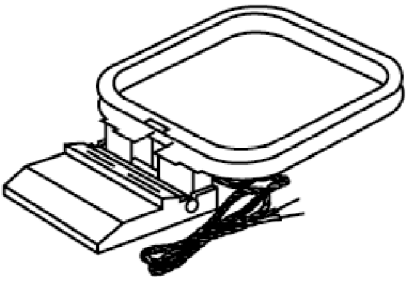
AC power supply cord



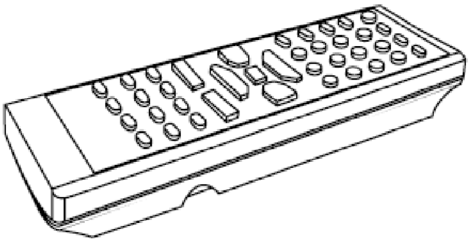
FM indoor antenna



AM Loop antenna



Remote Control Transmitter

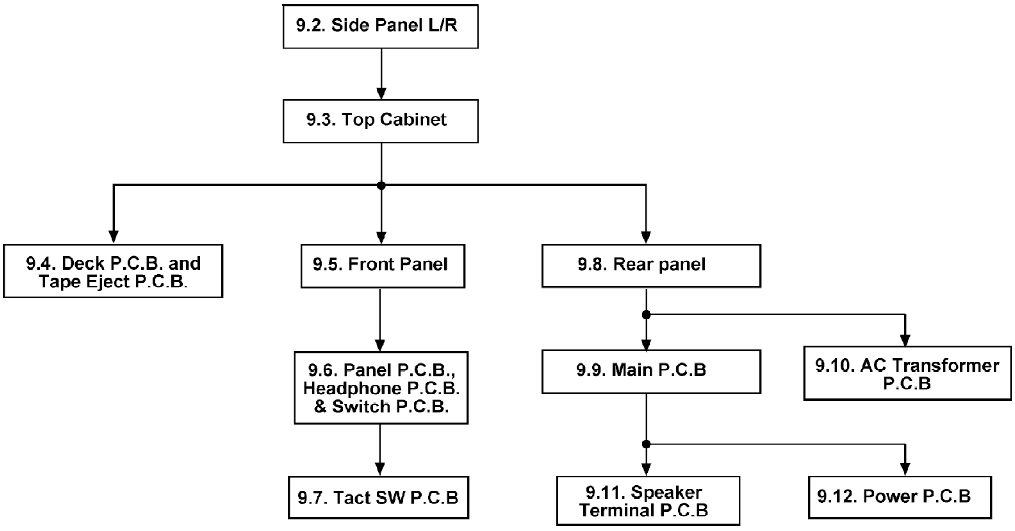


8. Operation Procedures

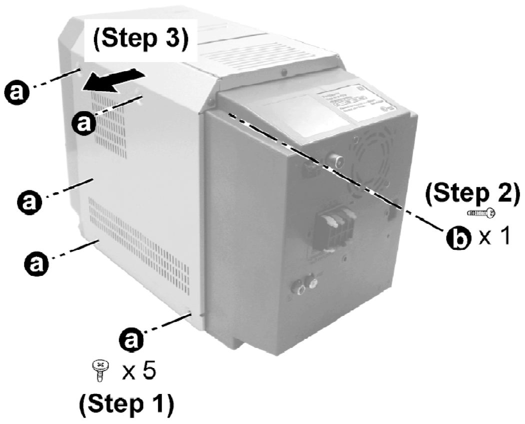
9. Assembling and Disassembling

9.1. Disassembly flow chart

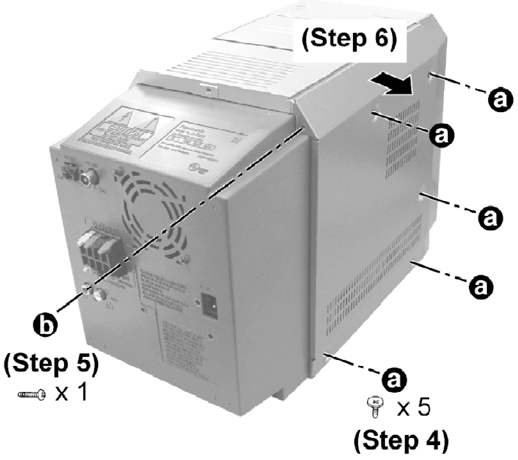
The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.
To assemble the unit, reverse the steps shown in the chart below.


9.2. Side Panel L/R
9.3. Top Cabinet
9.4. Deck P.C.B. and Tape Eject P.C.B.
9.5. Front Panel
9.8. Rear panel
9.6. Panel P.C.B., Headphone P.C.B. & Switch P.C.B.
9.9. Main P.C.B
9.10. AC Transformer P.C.B
9.7. Tact SW P.C.B
9.11. Speaker Terminal P.C.B
9.12. Power P.C.B

9.2. Disassembly of Side Panel L & R


(Step 3)
a
a
a
a
a
x 5
(Step 1)
(Step 2)
b x 1

Step 1 : Remove all the screws.
Step 2 : Remove the screw.
Step 3 : Remove the panel L as arrow shown.


(Step 6)
a
a
a
a
a
x 5
(Step 4)
b
(Step 5)
x 1

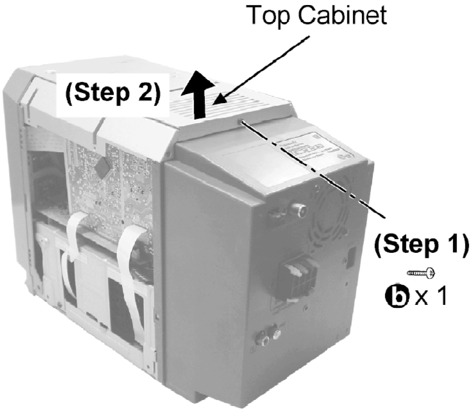
Step 4 : Remove all the screws.

Step 5 : Remove the screw.

Step 6 : Remove the panel R as arrow shown.

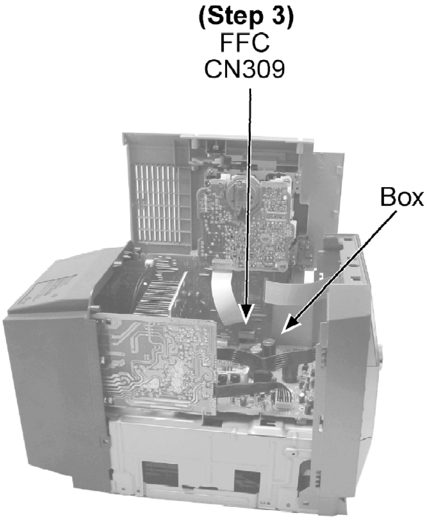
9.3. Disassembly of Top Cabinet

- Follow the (Step 1) - (Step 6) of Item 9.2.


Top Cabinet
(Step 2)
(Step 1)
b x 1

Step 1 : Remove the screws.

Step 2 : Lift up the Top Cabinet and push backward as arrow shown, flip Top Cabinet sideway.

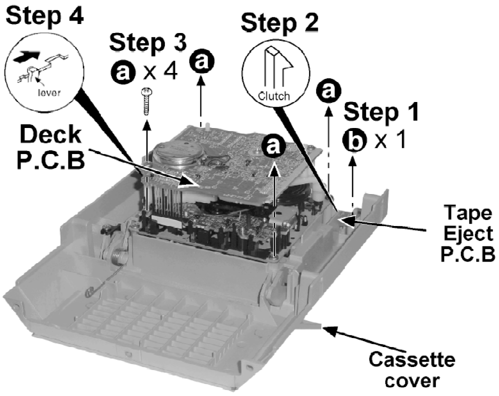

(Step 3)
FFC
CN309
Box

Step 3 : Detach the FFC Connector Board CN309.

9.4. Disassembly of Deck P.C.B. & Tape Eject P.C.B.

- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.


Step 4
lever
Step 3
a x 4
a
Step 2
Clutch
a
Step 1
b x 1
a
Deck
P.C.B
Tape
Eject
P.C.B
Cassette
cover

Step 1 : Remove the screw.

Step 2 : Release the clutch.

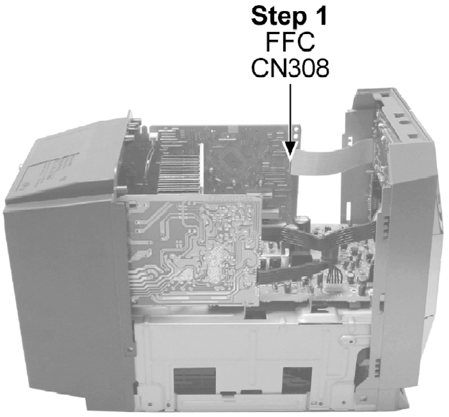
Step 3 : Remove all the screws.

Step 4 : Press the lever as arrow shown and remove the Deck Mechanism.

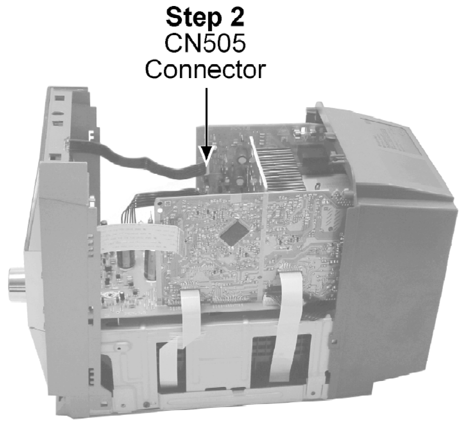
9.5. Disassembly of Front Panel

- Follow the (Step 1) - (Step 6) of Item 9.2.

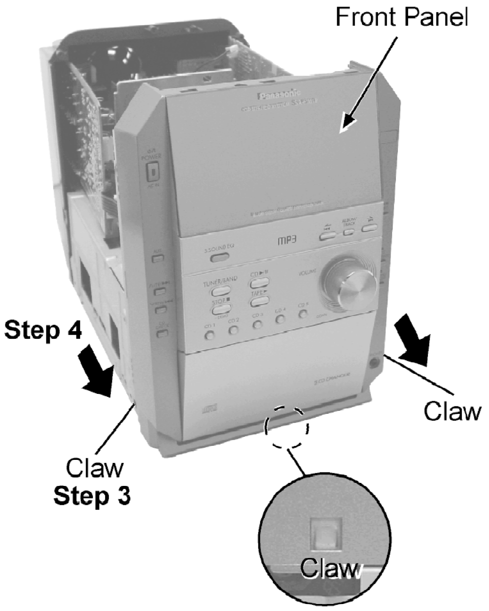
- Follow the (Step 1) - (Step 3) of Item 9.3.


Step 1
FFC
CN308

Step 1 : Detach the FFC Board (CN308).


Step 2
CN505
Connector

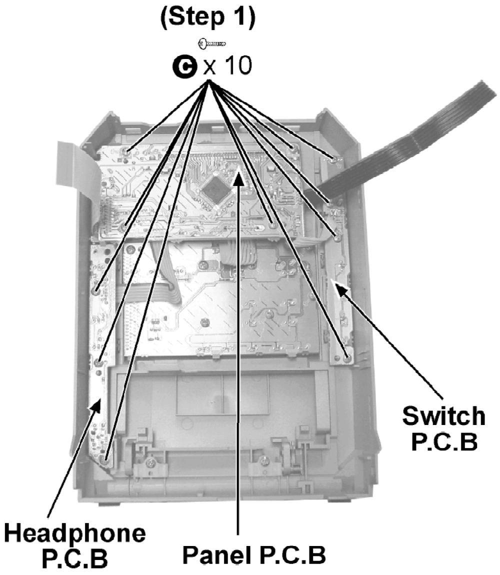
Step 2 : Detach the wire at CN505 Connector.


Front Panel
Step 4
Claw
Claw
Step 3
Claw

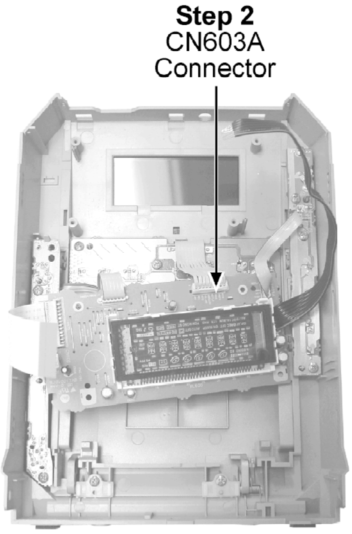
Step 3 : Release all the Claw.
Step 4 : Push the Front Panel as arrow shown.

9.6. Disassembly of Panel P.C.B., Headphone P.C.B. and Switch P.C.B.

- Follow the (Step 1) - (Step 6) of Item 9.2.
- Follow the (Step 1) - (Step 3) of Item 9.3.
- Follow the (Step 1) - (Step 4) of Item 9.5.


(Step 1)
C x 10
Switch P.C.B
Headphone P.C.B
Panel P.C.B

Step 1 : Remove all the screws.


Step 2
CN603A
Connector

Step 2 : Detach the CN603A Connector.

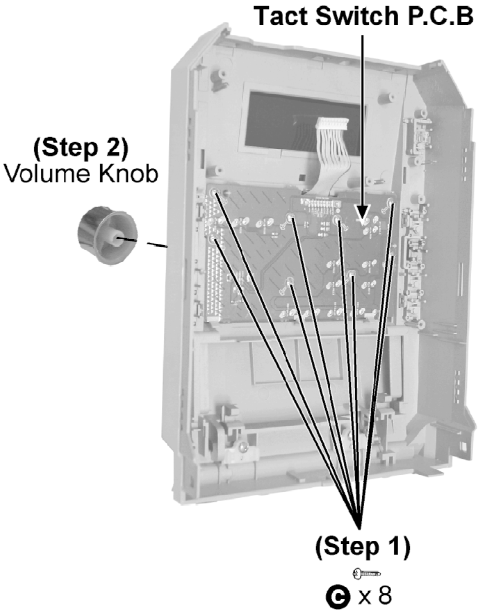
9.7. Disassembly of Tact Switch P.C.B.

- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.

- Follow the (Step 1) - (Step 4) of Item 9.5.

- Follow the (Step 1) - (Step 2) of Item 9.6.


Tact Switch P.C.B
(Step 2)
Volume Knob
(Step 1)
x 8

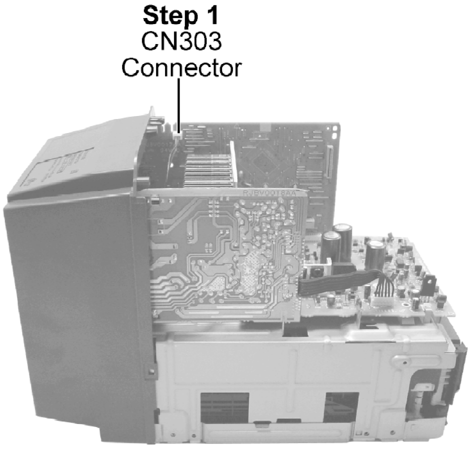
Step 1 : Remove all the screws.
Step 2 : Remove the Volume Knob.

9.8. Disassembly of Rear Panel

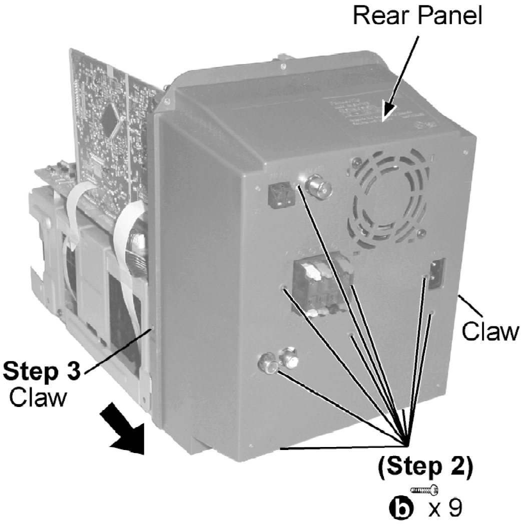
- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.

- Follow the (Step 1) - (Step 4) of Item 9.5.


Step 1
CN303
Connector

Step 1 : Detach the wire at CN303 Connector.


Rear Panel
Claw
Step 3
Claw
(Step 2)
b x 9

Step 2 : Remove all the screws.

Step 3 : Release the Claws and remove Rear Panel as arrows shown.

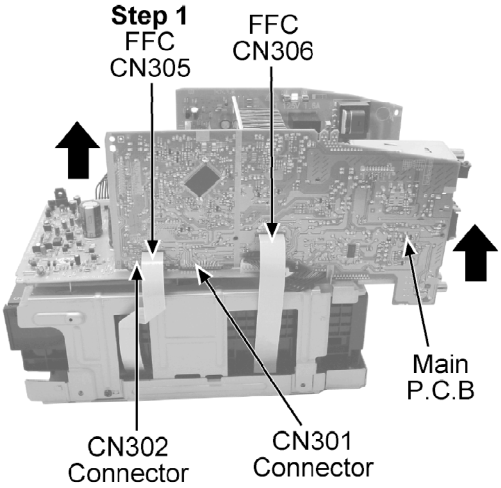
9.9. Disassembly of Main P.C.B.

- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.

- Follow the (Step 1) - (Step 4) of Item 9.5.

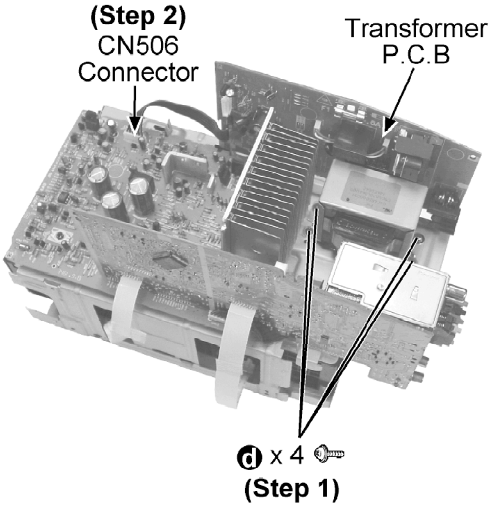
- Follow the (Step 1) - (Step 3) of Item 9.8.


Step 1
FFC
CN305
FFC
CN306
Main
P.C.B
CN302
Connector
CN301
Connector

Step 1 : Remove the CN301, CN302 Connector and FFC CN305, CN306 .
Step 2 : Remove the Main P.C.B as arrow shown.

9.10. Disassembly of Transformer P.C.B.

- Follow the (Step 1) - (Step 6) of Item 9.2.
- Follow the (Step 1) - (Step 3) of Item 9.3.
- Follow the (Step 1) - (Step 4) of Item 9.5.
- Follow the (Step 1) - (Step 3) of Item 9.8.

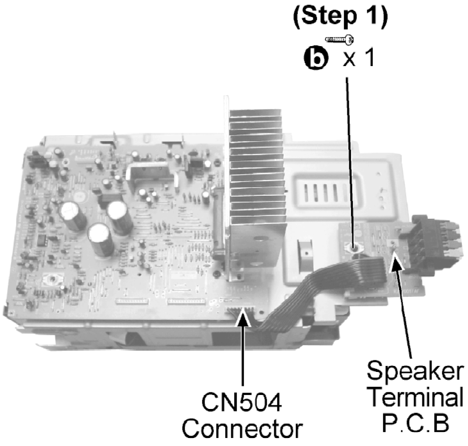

(Step 2)
CN506
Connector
Transformer
P.C.B
d x 4
(Step 1)

Step 1 : Remove all the screws.
Step 2 : Detach the CN506 Connector.

9.11. Disassembly of Speaker Terminal P.C.B

- Follow the (Step 1) - (Step 6) of Item 9.2.
- Follow the (Step 1) - (Step 3) of Item 9.3.
- Follow the (Step 1) - (Step 4) of Item 9.5.
- Follow the (Step 1) - (Step 3) of Item 9.8.
- Follow the (Step 1) - (Step 2) of Item 9.9.

- Follow the (Step 1) - (Step 2) of Item 9.10.


(Step 1)
b x 1
Speaker Terminal P.C.B
CN504 Connector

Step 1 : Remove the screw and CN504 Connector.

9.12. Disassembly of Power P.C.B

- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.

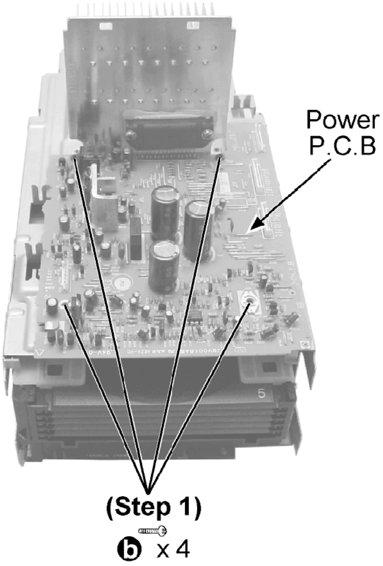
- Follow the (Step 1) - (Step 4) of Item 9.5.

- Follow the (Step 1) - (Step 3) of Item 9.8.

- Follow the (Step 1) - (Step 2) of Item 9.9.

- Follow the (Step 1) - (Step 2) of Item 9.10.

- Follow the (Step 1) of Item 9.11.


Power P.C.B
(Step 1)
b x 4

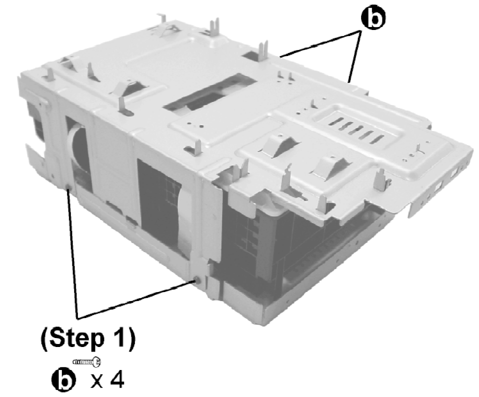
Step 1 : Remove all the screws.

9.13. Disassembly of CR16 Mechanism

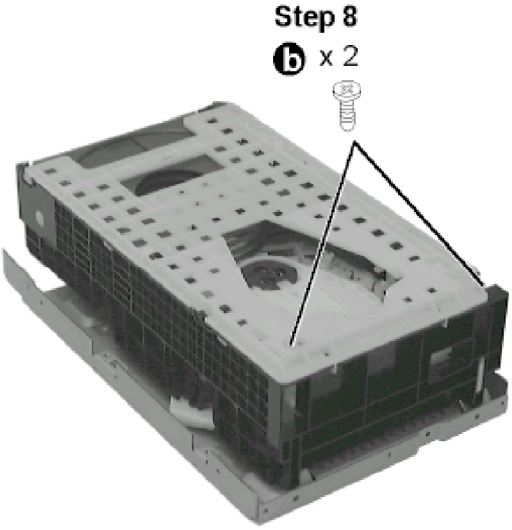
- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.

- Follow the (Step 1) - (Step 4) of Item 9.5.
- Follow the (Step 1) - (Step 3) of Item 9.8.
- Follow the (Step 1) of Item 9.9.



Step 1 : Remove all the screws.

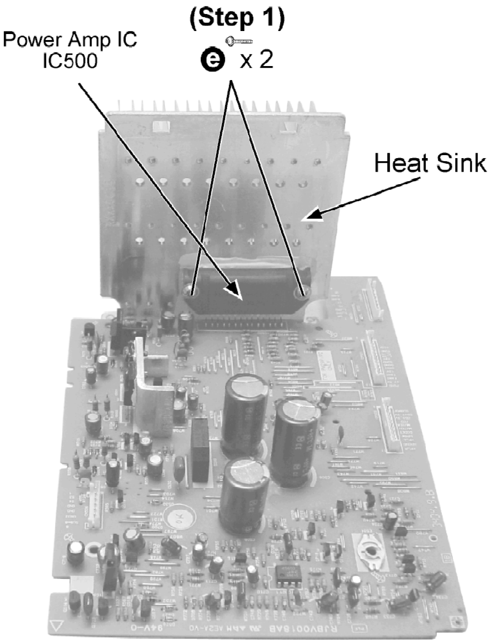


Step 2 : Remove 2 screws. Lift up the CD Mecha Unit.

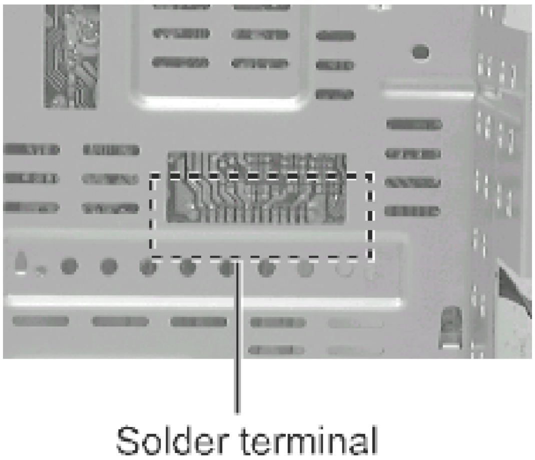
9.14. Checking Procedure for Each Major P.C.B.

9.14.1. Replacement of the Power Amplifier IC

- Replacement of the Power Amplifier IC
- Follow the (Step 1) - (Step 6) of Item 9.2.
- Follow the (Step 1) - (Step 3) of Item 9.3.
- Follow the (Step 1) - (Step 4) of Item 9.5.
- Follow the (Step 1) - (Step 3) of Item 9.8.
- Follow the (Step 1) - (Step 2) of Item 9.9.
- Follow the (Step 1) - (Step 2) of Item 9.10.
- Follow the (Step 1) of Item 9.11.
- Follow the (Step 1) of Item 9.12.


(Step 1)
Power Amp IC
IC500
e x 2
Heat Sink

Step 1 : Remove 2 screws fixed to the Power Amp I.C.

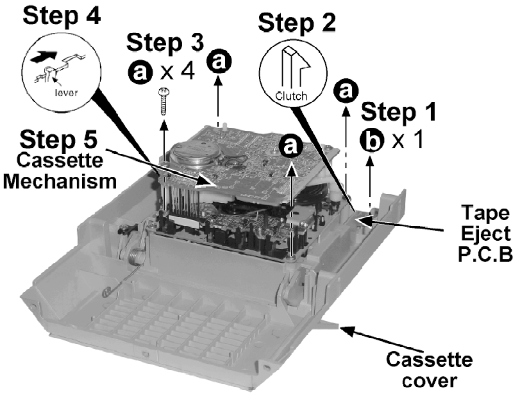

Solder terminal

Step 2 : Unsolder the terminals of Power Amp IC, transistor and replace the component.

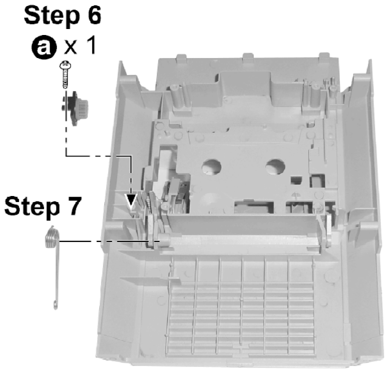
9.15. Procedure for Replacing Cassette Holder

- Follow the (Step 1) - (Step 6) of Item 9.2.

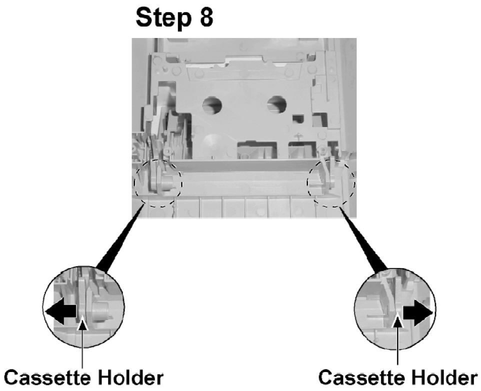
- Follow the (Step 1) - (Step 3) of Item 9.3.


Step 4
lever
Step 3
a x 4
a
Step 2
Clutch
a
Step 1
b x 1
Step 5
Cassette
Mechanism
a
Tape
Eject
P.C.B
Cassette
cover

Step 1 : Remove the screw.
Step 2 : Release the clutch.
Step 3 : Remove all the screws.
Step 4 : Press the lever to open the cassette cover.
Step 5 : Remove the cassette mechanism unit.


Step 6
a x 1
Step 7

Step 6 : Remove the screw and damper gear.
Step 7 : Remove the cassette open spring.


Step 8
Cassette Holder
Cassette Holder

Step 8 : Pull out the cassette holder to the direction of the arrow shown.

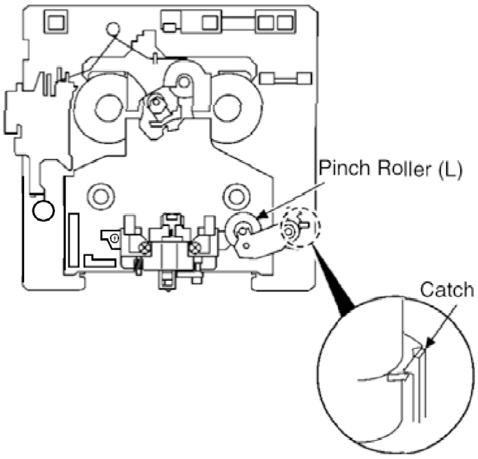
9.16. Procedure for Replacing Pinch Roller and Head Block (Cassette Mechanism Unit)

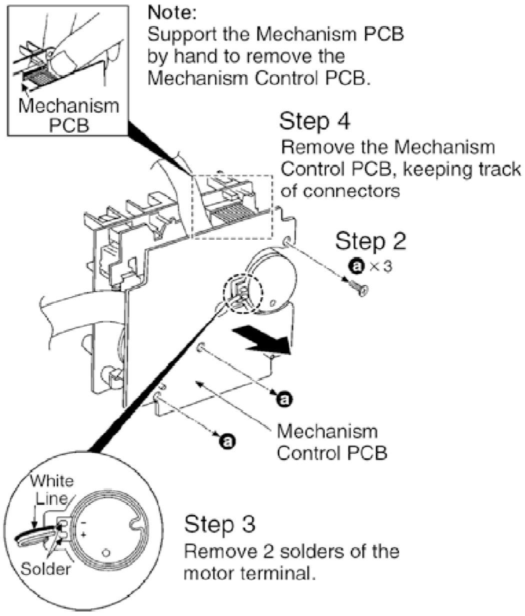
- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.

- Follow the (Step 1) - (Step 5) of Item 9.15.

Step 1
Release catches to remove the pinch rollers (L).

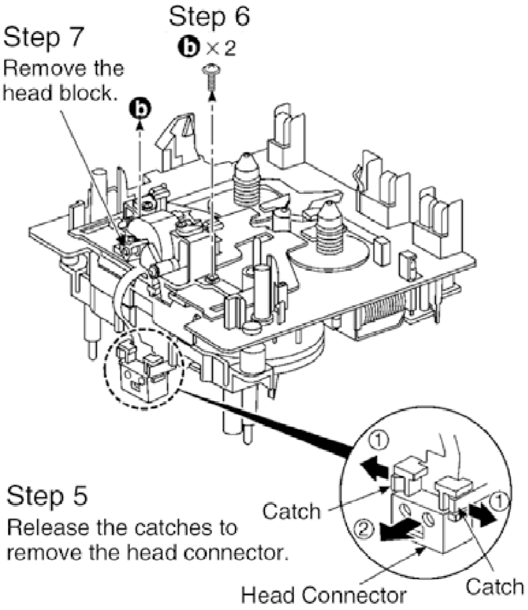

Pinch Roller (L)
Catch


Note:
Support the Mechanism PCB by hand to remove the Mechanism Control PCB.

Step 4
Remove the Mechanism Control PCB, keeping track of connectors

Step 2
ⓐ × 3

Step 3
Remove 2 solders of the motor terminal.
Mechanism PCB
ⓐ
ⓐ
Mechanism Control PCB
White Line
Solder
-
+


Step 7
Remove the head block.
Step 6
ⓑ × 2
ⓑ
Step 5
Release the catches to remove the head connector.
Catch
①
②
①
Head Connector
Catch

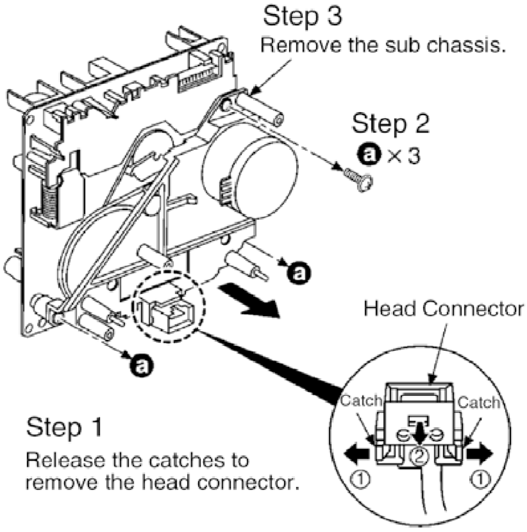
9.17. Procedure for Replacing Motor, Capstan Belt A, Capstan Belt B, and Winding Belt (Cassette Mechanism Unit)

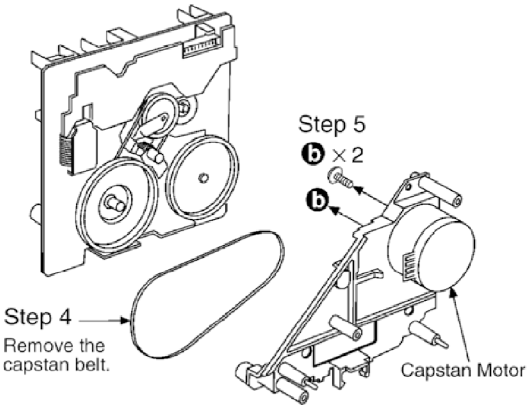
- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.

- Follow the (Step 1) - (Step 5) of Item 9.15.

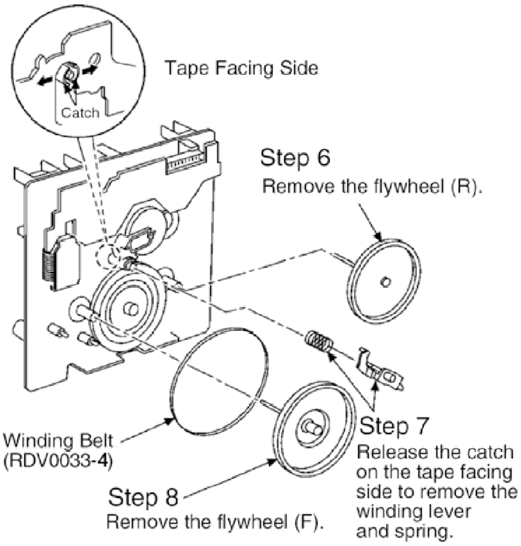
- Follow the (Step 1) - (Step 5) of Item 9.16.


Step 3
Remove the sub chassis.
Step 2
ⓐ × 3
ⓐ
ⓐ
Head Connector
Catch
Catch
①
②
①
Step 1
Release the catches to remove the head connector.



Step 5
b × 2
b
Capstan Motor

Step 4
Remove the capstan belt.



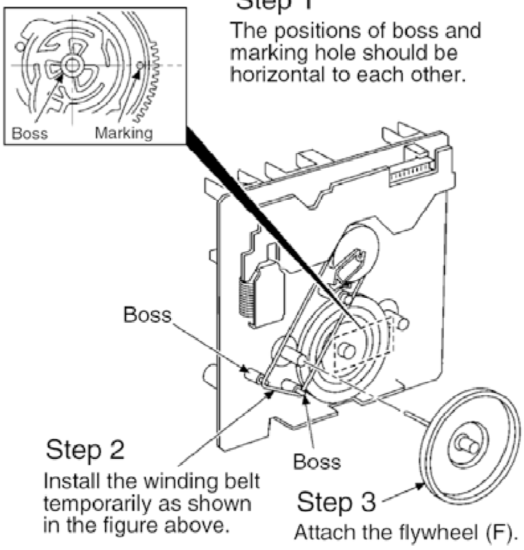
Tape Facing Side
Catch
Winding Belt
(RDV0033-4)

Step 6
Remove the flywheel (R).

Step 7
Release the catch on the tape facing side to remove the winding lever and spring.

Step 8
Remove the flywheel (F).

Installing Belt

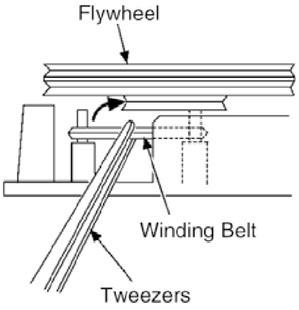


Boss
Marking
Boss
Boss

Step 1
The positions of boss and marking hole should be horizontal to each other.

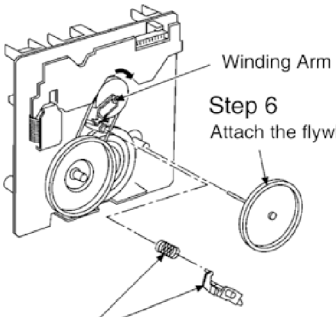
Step 2
Install the winding belt temporarily as shown in the figure above.

Step 3
Attach the flywheel (F).


Flywheel
Winding Belt
Tweezers

Step 4

Catch the winding belt on the flywheel (F).

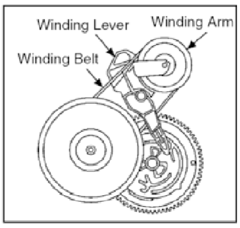

Winding Arm

Step 6

Attach the flywheel (R).

Step 5

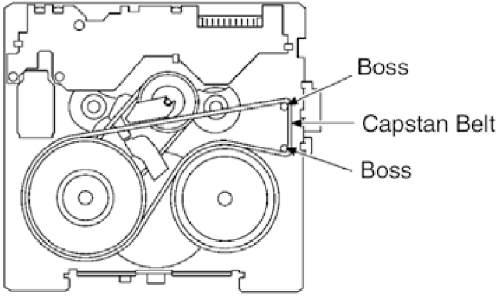
Install the winding lever and spring while the winding arm is pressed to the arrow direction. (Be sure that the winding lever is firmly inserted and the catch is hooked.)

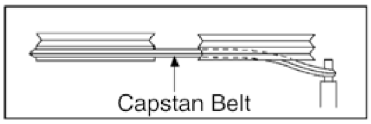

Winding Lever
Winding Arm
Winding Belt

Note:
The winding lever should be positioned as shown in the right figure.

Step 7

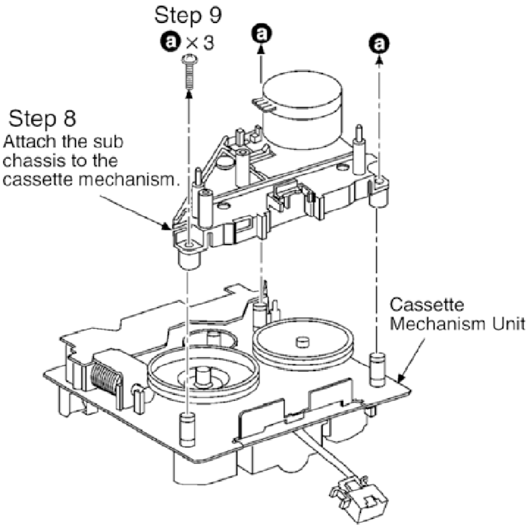
Install the capstan belt temporarily as shown in the figure below.


Boss
Capstan Belt
Boss


Capstan Belt

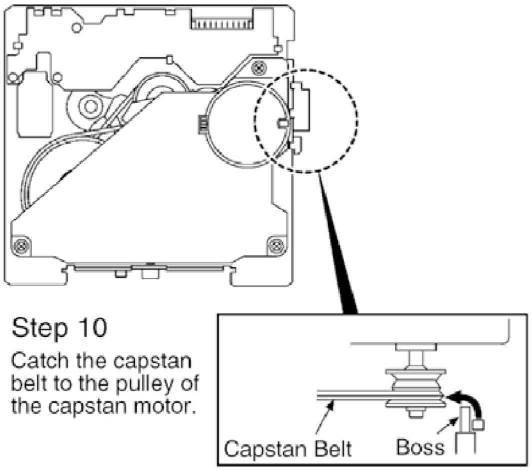
Side View

Note:
Keep the belt away from grease.


a × 3
a
a
Cassette Mechanism Unit

Step 9

Step 8
Attach the sub chassis to the cassette mechanism.


Capstan Belt
Boss

Step 10
Catch the capstan belt to the pulley of the capstan motor.

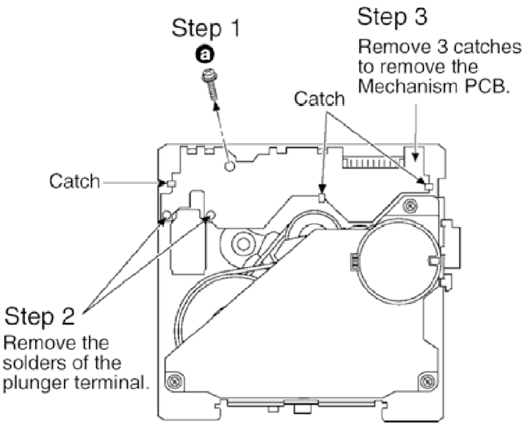
9.18. Procedure for Replacing Parts on Mechanism PCB

- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.

- Follow the (Step 1) - (Step 5) of Item 9.15.

- Follow the (Step 1) - (Step 5) of Item 9.16.


a
Catch
Catch

Step 1

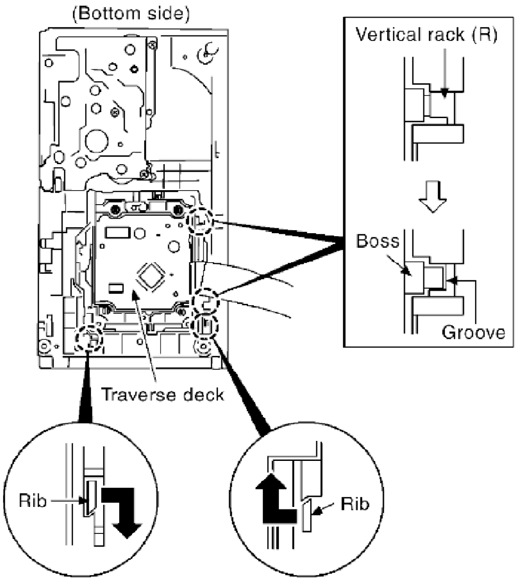
Step 3
Remove 3 catches to remove the Mechanism PCB.

Step 2
Remove the solders of the plunger terminal.

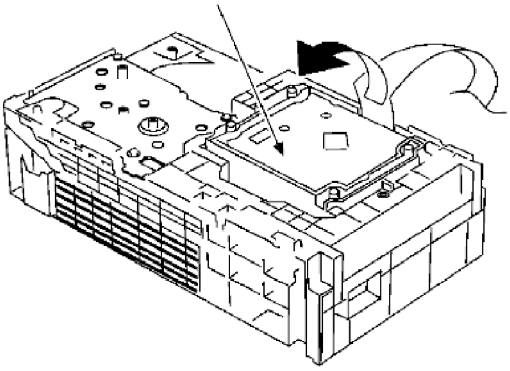
9.19. Replacement of CD traverse deck

- **Follow the (Step 1) - (Step 6) of Item 9.2.**
- **Follow the (Step 1) - (Step 3) of Item 9.3.**
- **Follow the (Step 1) - (Step 4) of Item 9.5.**
- **Follow the (Step 1) - (Step 3) of Item 9.8.**
- **Follow the (Step 1) of Item 9.9.**
- **Follow the (Step 1) - (Step 2) of Item 9.13.**

Step 1
Move ribs at both sides to the arrow direction
(The vertical rack (R) slides and the groove opens)



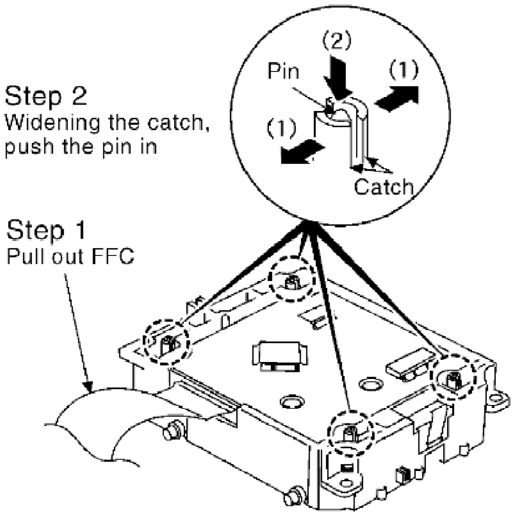
Step 2
Remove CD traverse deck rotating to the arrow direction.

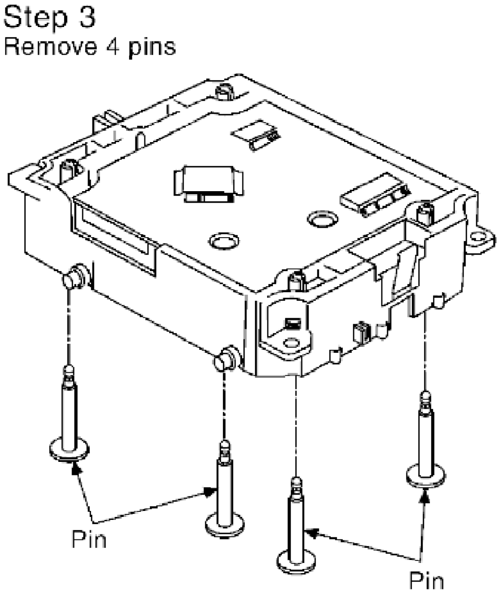


9.20. Replacement of optical pickup unit (CD mechanism)

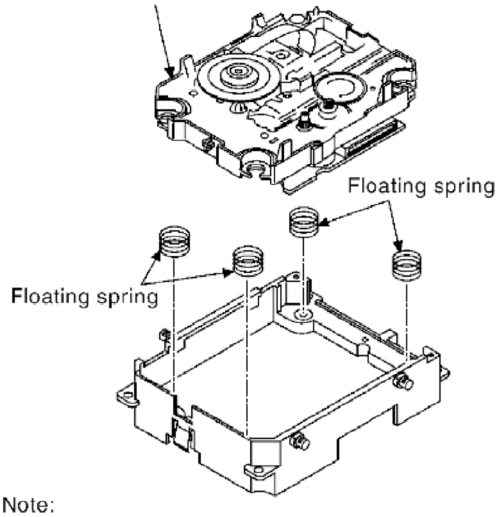
- **Follow the (Step 1) - (Step 6) of Item 9.2.**
- **Follow the (Step 1) - (Step 3) of Item 9.3.**
- **Follow the (Step 1) - (Step 4) of Item 9.5.**
- **Follow the (Step 1) - (Step 3) of Item 9.8.**
- **Follow the (Step 1) of Item 9.9.**

- Follow the (Step 1) - (Step 2) of Item 9.13.
- Follow the (Step 1) - (Step 2) of Item 9.19.


Step 2
Widening the catch, push the pin in
(2)
Pin
(1)
(1)
Catch
Step 1
Pull out FFC


Step 3
Remove 4 pins
Pin
Pin

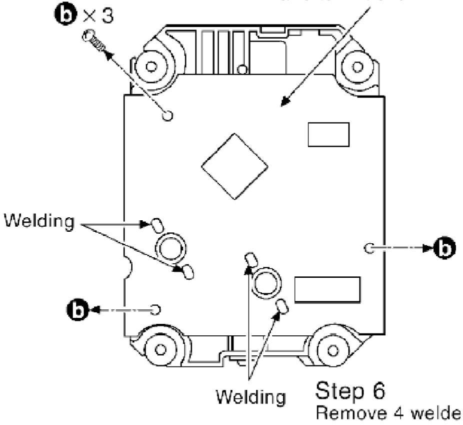
Step 4
Remove the traverse deck (JUN)


Floating spring
Floating spring

Note:
As floating springs (4 pieces) come off at the same time, be careful not to lose them.

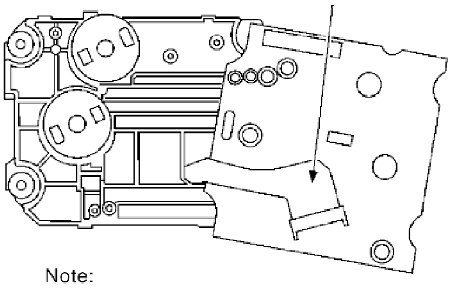
Step 7
Remove CD servo board and turn it over.

Step 5
ⓑ × 3

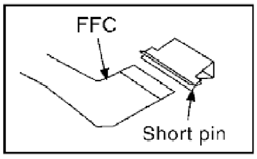

Welding
ⓑ
ⓑ
Welding

Step 6
Remove 4 welded parts of the motor terminal.

Step 8
Pull FFC out from the connector.

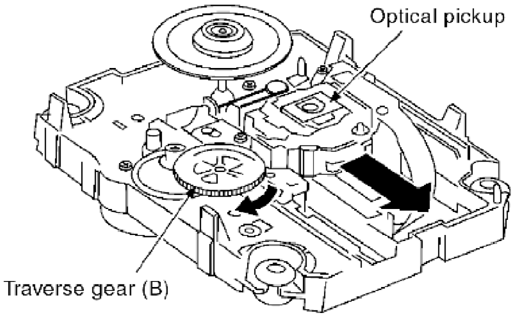


Note:
Insert a short pin into FFC of the optical pickup.
[See "Notice on handling of the optical pickup"]

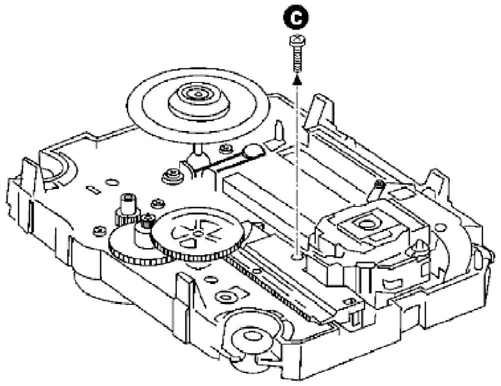

FFC
Short pin

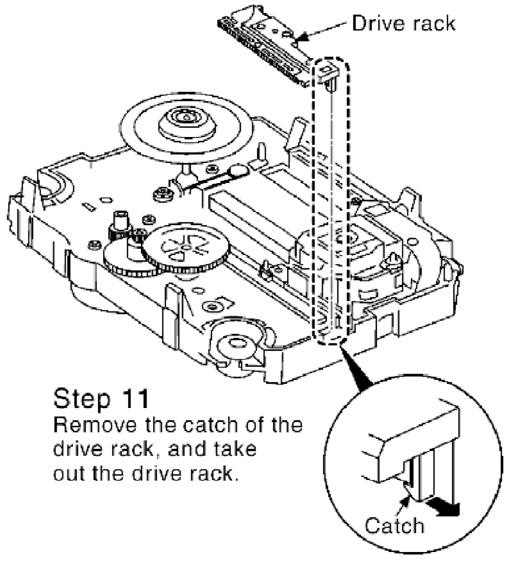
Step 9

Rotate the traverse deck (B) to the arrow direction and shift the optical pickup to the furthest backward.


Optical pickup
Traverse gear (B)

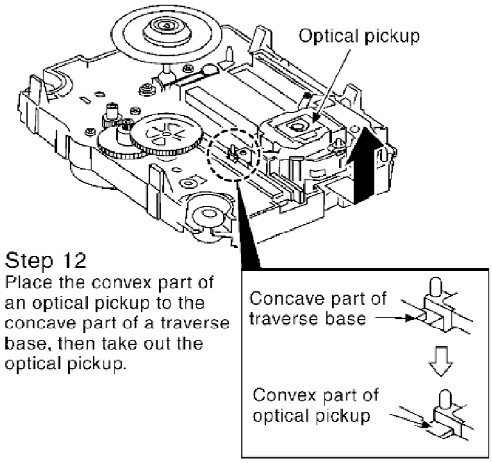
Step 10



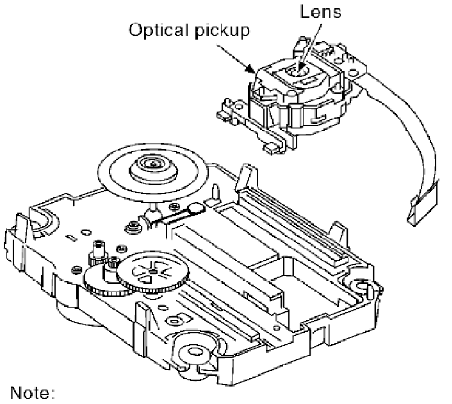

Drive rack
Catch

Step 11

Remove the catch of the drive rack, and take out the drive rack.


Optical pickup
Concave part of traverse base
Convex part of optical pickup

Step 12
Place the convex part of an optical pickup to the concave part of a traverse base, then take out the optical pickup.


Lens
Optical pickup

Note:
Do not touch the lens of the optical pickup

9.21. Replacement of a traverse gear A and a traverse gear B

- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.

- Follow the (Step 1) - (Step 4) of Item 9.5.

- Follow the (Step 1) - (Step 3) of Item 9.8.

- Follow the (Step 1) of Item 9.9.

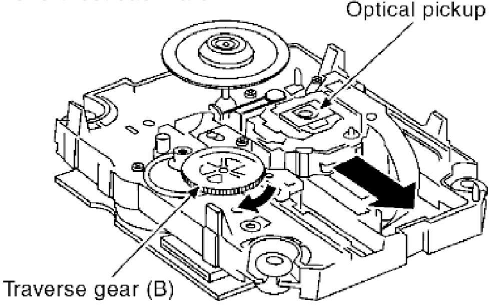
- Follow the (Step 1) - (Step 2) of Item 9.13.

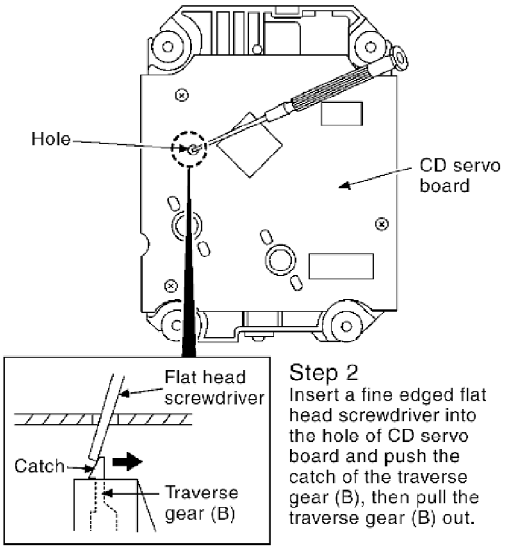
- Follow the (Step 1) - (Step 2) of Item 9.19.

- Follow the (Step 1) - (Step 12) of Item 9.20.

Step 1

Rotate the traverse gear (B) to the arrow direction, and shift the optical pickup to the furthest backward.


Optical pickup
Traverse gear (B)


Hole
CD servo board
Flat head screwdriver
Catch
Traverse gear (B)

Step 2

Insert a fine edged flat head screwdriver into the hole of CD servo board and push the catch of the traverse gear (B), then pull the traverse gear (B) out.

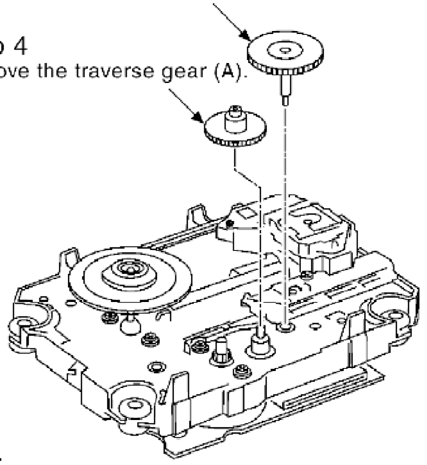
Note:
Be careful not to break the hook of the traverse gear (B)

Step 3

Remove the traverse gear (B).

Step 4

Remove the traverse gear (A).



Note:
Do not use the removed traverse gear (B) anymore.
Surely replace with a new one.

9.22. Procedure for removing CD loading mechanism

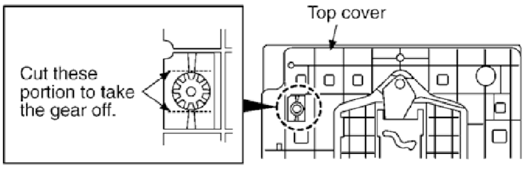
1. **Turn off by pressing power SW in the body.**
2. **Unplug AC power cord after the indication of [GOOD-BYE], then disassemble the body.**
3. **Disassemble the body, and take out CD loading mechanism.**
4. **Perform disassembly according to the following procedure for disassembly.**

9.23. CR16 mechanism disassembly procedure

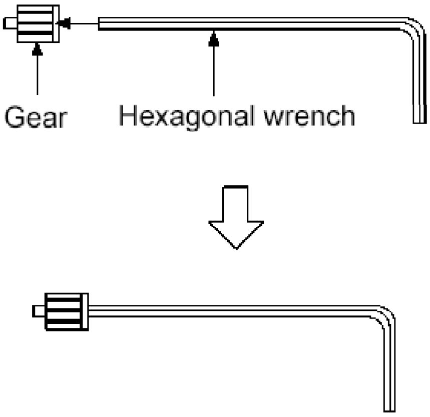
9.23.1. Gear for servicing information

- **This unit has a gear which used for chacking items (open/close of disc tray, up/down operation of traverse unit by manually) when servicing. (For gear information, that is described on the items for disassembly procedures.)**
- **For preparation of gear (for servicing), perform the procedures as follows.**
- **In case of re-servicing the same set, the “ gear for servicing” may be took off because it had been used. So, the “gear for servicing” must be stored.**

1. **Remove the gear attached to top cover of CD loading mechanism.**



2. **Insert the hexgonal wrench (2.5mm) into the gear.**



(Preparation of gear as jig is completed)

9.23.2. Replacement for the disc tray

- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.

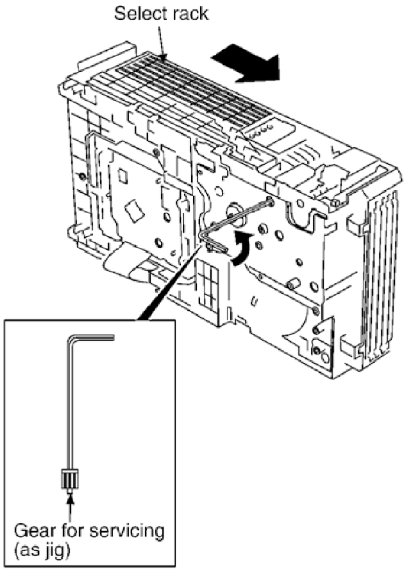
- Follow the (Step 1) - (Step 4) of Item 9.5.

- Follow the (Step 1) - (Step 3) of Item 9.8.

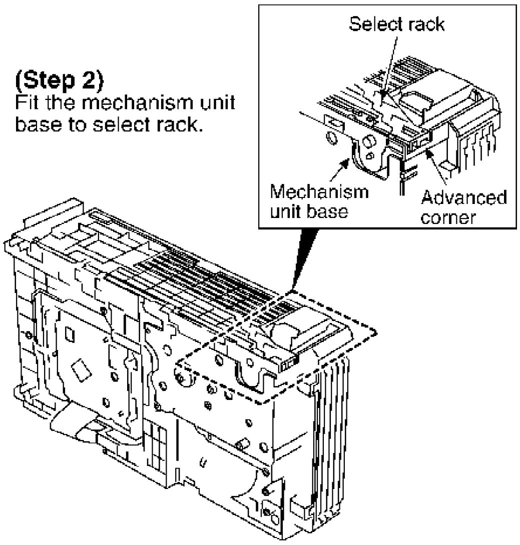
- Follow the (Step 1) of Item 9.9.

- Follow the (Step 1) - (Step 2) of Item 9.13.

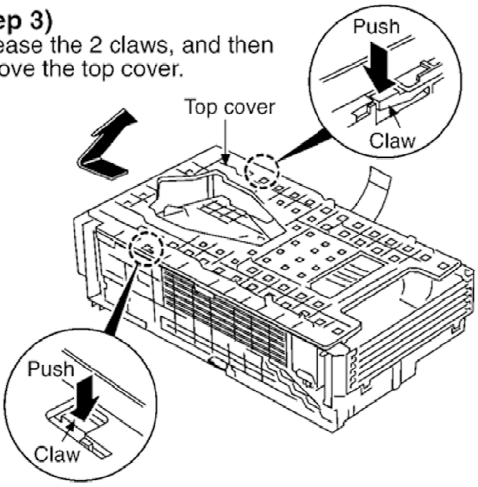
(Step 1)
Rotate the gear for servicing and move the select rack to advanced corner.


Select rack
Gear for servicing (as jig)

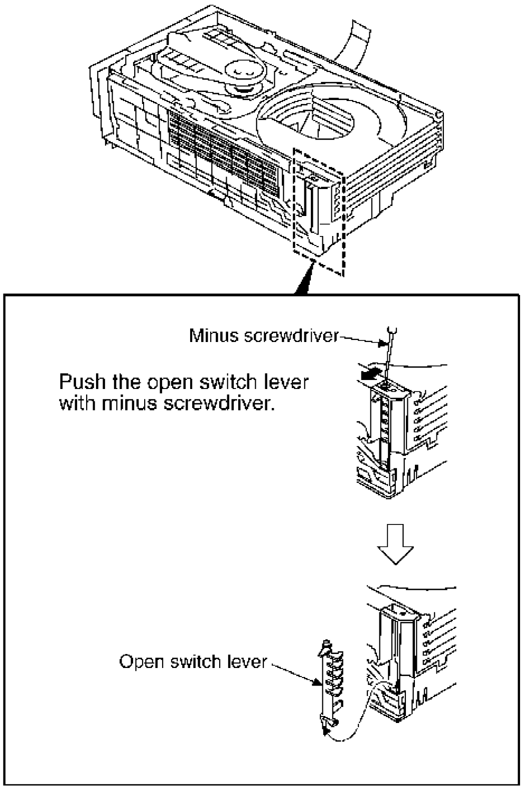
(Step 2)
Fit the mechanism unit base to select rack.


Select rack
Mechanism unit base
Advanced corner

(Step 3)
Release the 2 claws, and then remove the top cover.

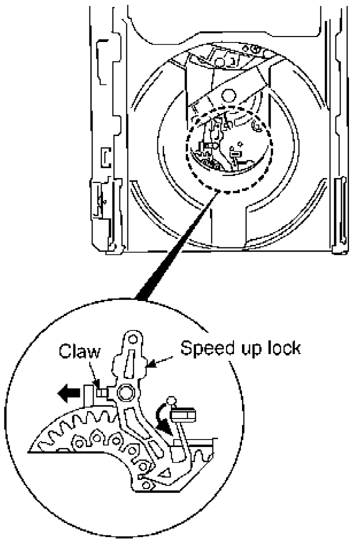

Push
Claw
Top cover
Push
Claw

(Step 4)
Remove the open switch lever.


Minus screwdriver
Open switch lever

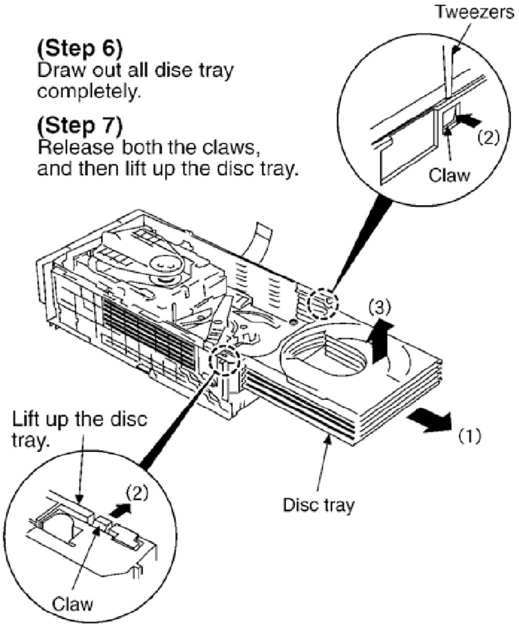
Push the open switch lever with minus screwdriver.

(Step 5)
Release the claw, and then remove the speed up lock.

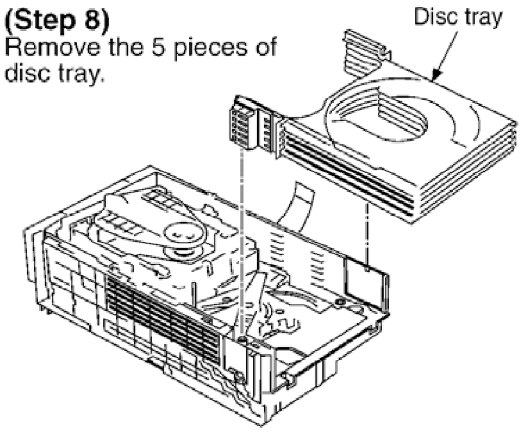

Claw
Speed up lock

(Step 6)
Draw out all dise tray completely.

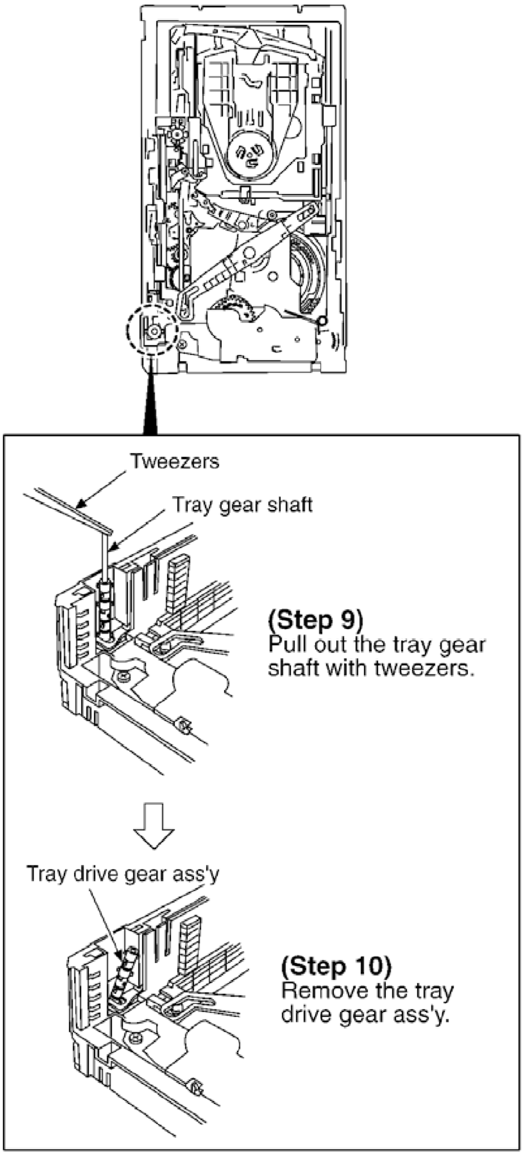
(Step 7)
Release both the claws, and then lift up the disc tray.


Insert the tweezers between the mechanism base and disc tray, and then lift up the disc tray.

Tweezers
(2)
Claw
(3)
(1)
Disc tray
Lift up the disc tray.
(2)
Claw



(Step 8)
Remove the 5 pieces of disc tray.



(Step 9)
Pull out the tray gear shaft with tweezers.

(Step 10)
Remove the tray drive gear ass'y.

Tweezers
Tray gear shaft
Tray drive gear ass'y

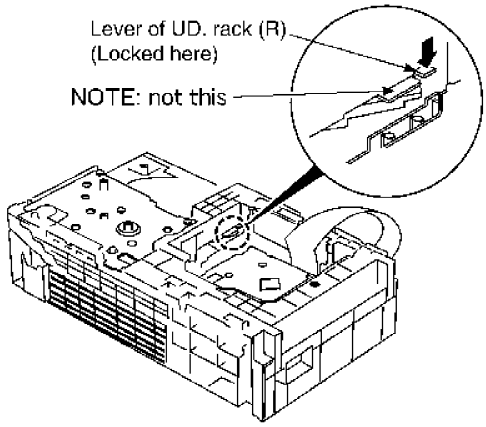
9.23.3. Replacement for the traverse deck

- Follow the (Step 1) - (Step 6) of Item 9.2.

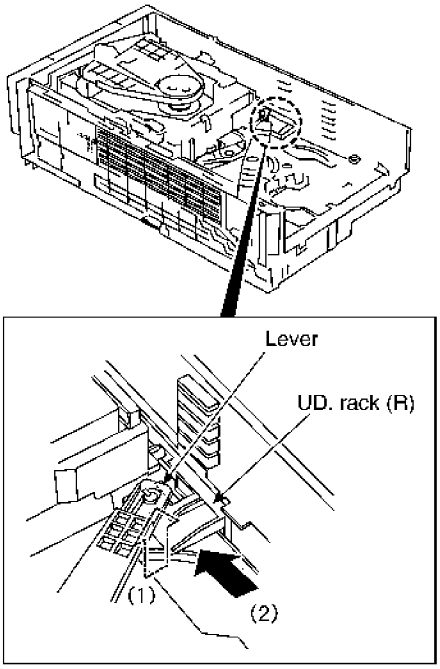
- **Follow the (Step 1) - (Step 3) of Item 9.3.**
- **Follow the (Step 1) - (Step 4) of Item 9.5.**
- **Follow the (Step 1) - (Step 3) of Item 9.8.**
- **Follow the (Step 1) of Item 9.9.**
- **Follow the (Step 1) - (Step 2) of Item 9.13.**
- **Follow the (Step 1) - (Step 10) of item 9.23.2.**

(Step 1)
Confirm the position for lever of UD. rack (R) to remove traverse unit.

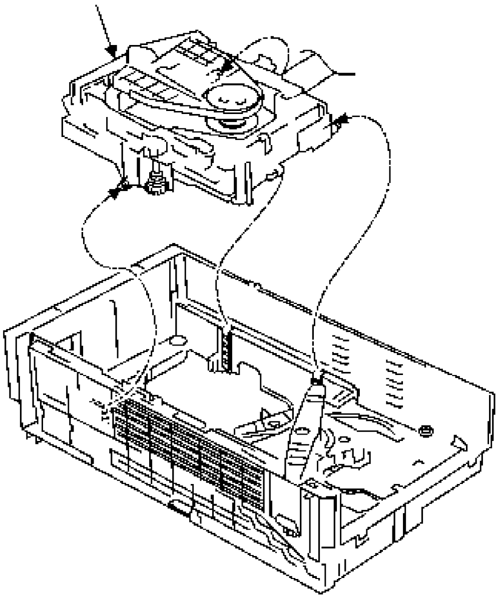
(Step 2)
Turn the unit over. (Upside: P.C.B.)


Lever of UD. rack (R)
(Locked here)
NOTE: not this

(Step 3)
Turn the unit over again, slide UD. rack (R) while pushing up the lever from the bottom.

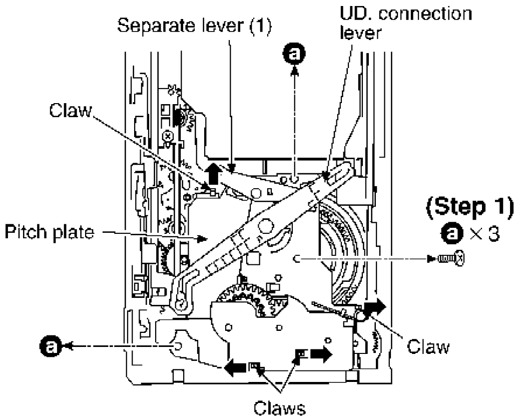

Lever
UD. rack (R)
(1)
(2)

(Step 4)
Remove the traverse unit.



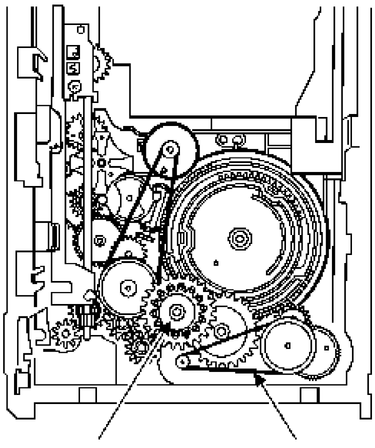
9.23.4. Disassembly for CD loading unit

- **Follow the (Step 1) - (Step 6) of Item 9.2.**
- **Follow the (Step 1) - (Step 3) of Item 9.3.**
- **Follow the (Step 1) - (Step 4) of Item 9.5.**
- **Follow the (Step 1) - (Step 3) of Item 9.8.**
- **Follow the (Step 1) of Item 9.9.**
- **Follow the (Step 1) - (Step 2) of Item 9.13.**
- **Follow the (Step 1) - (Step 10) of item 9.23.2.**
- **Follow the (Step 1) - (Step 4) of item 9.23.3.**

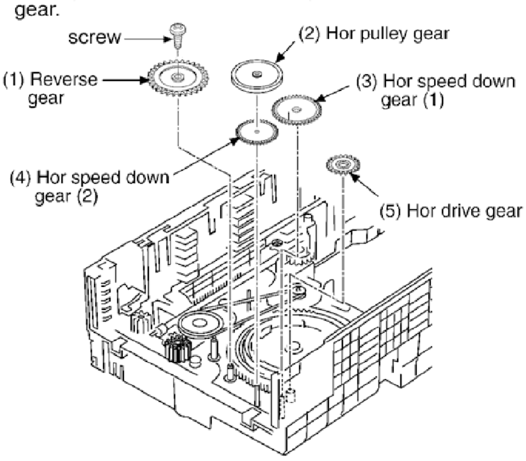

Separate lever (1)
UD. connection lever
a
Claw
Pitch plate
(Step 1)
a × 3
a
Claw
Claws

(Step 2)
Release the 4 claws, and then remove the pitch plate together with separate lever (1) and UD. connection lever.

(Step 3)
Remove the speed up gear and hor belt.

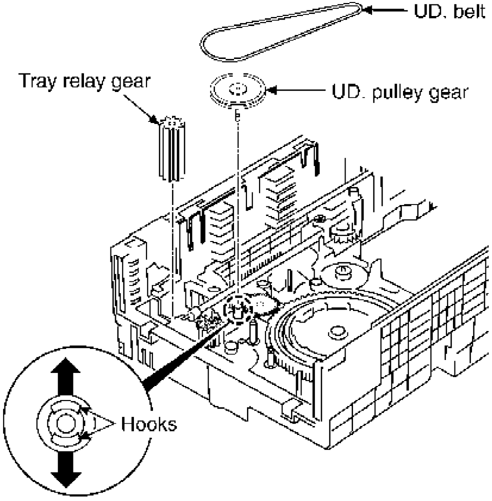

Speed up gear
Hor belt

(Step 4)
Remove the reverse gear, hor pulley gear, hor speed down gear (1), hor speed down gear (2) and hor drive gear.


screw
(1) Reverse gear
(2) Hor pulley gear
(3) Hor speed down gear (1)
(4) Hor speed down gear (2)
(5) Hor drive gear

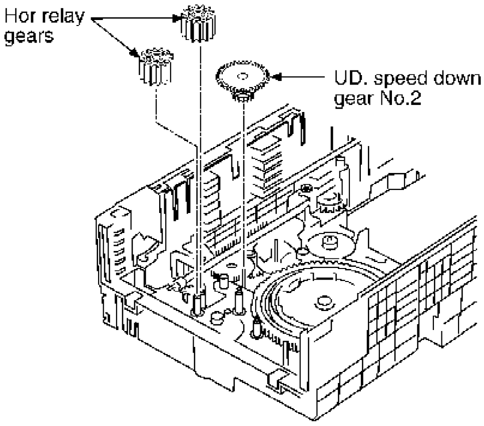
(Step 5)
Remove the UD. belt and tray relay gear.

(Step 6)
Pull out the UD. pulley gear, loosen 2 hooks of the bottom of mechanism bese.

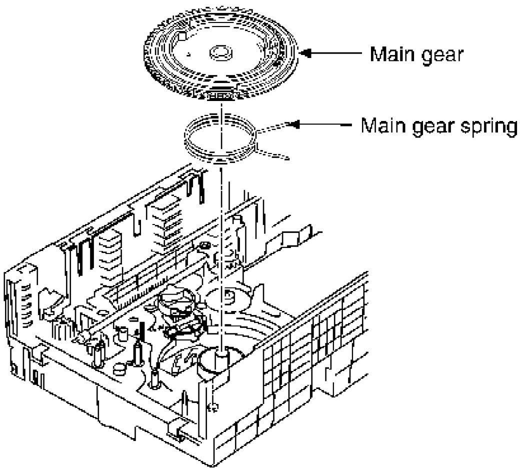

UD. belt
Tray relay gear
UD. pulley gear
Hooks

(Bottom side)

(Step 7)
Remove the 2 hor relay gears and UD. speed down gear No.2.

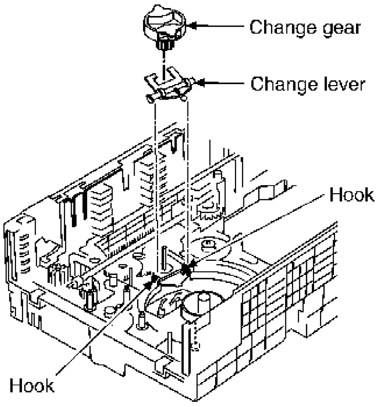

Hor relay gears
UD. speed down gear No.2

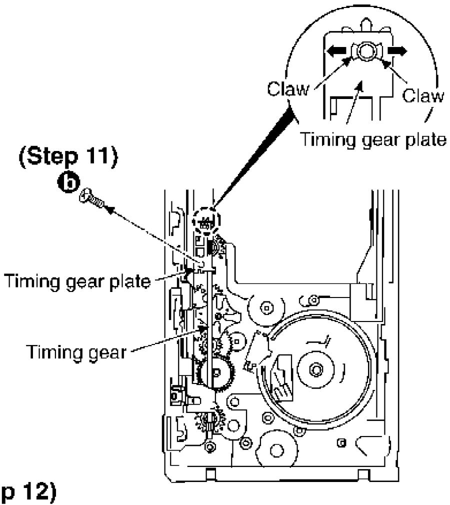
(Step 8)
Remove the main gear and main gear spring.


Main gear
Main gear spring

(Step 9)
Remove the change gear.

(Step 10)
Raise the change lever upright, and pull it out of hook.

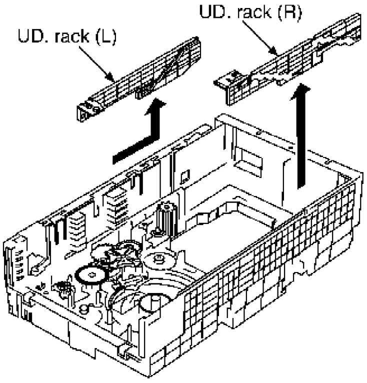

Change gear
Change lever
Hook
Hook


Claw
Claw
Timing gear plate
(Step 11)
ⓑ
Timing gear plate
Timing gear

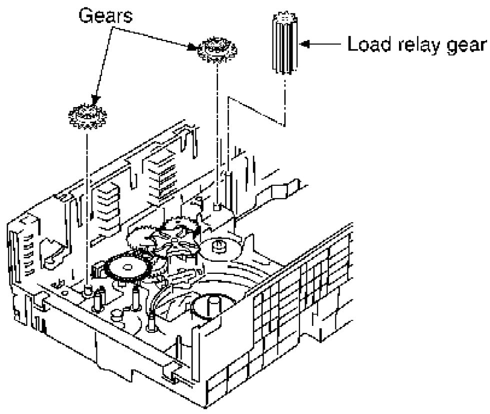
(Step 12)
Release the 2 claws, and then remove the timing gear and timing gear plate.

(Step 13)
Move the UD. rack (L) to backward, and then remove it.

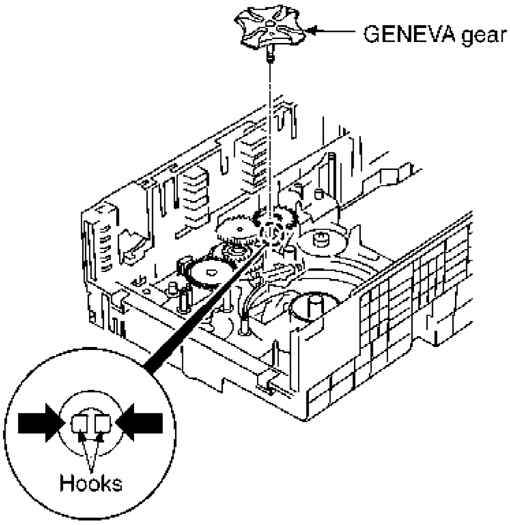
(Step 14)
Remove the UD. rack (R).


UD. rack (R)
UD. rack (L)

(Step 15)
Remove the 2 gears and load relay gear.

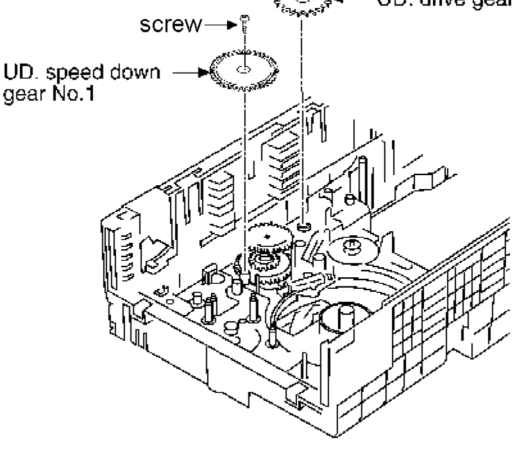

Gears
Load relay gear

(Step 16)
Pull out the GENEVA gear, loosen 2 hooks of the bottom of mechanism base.

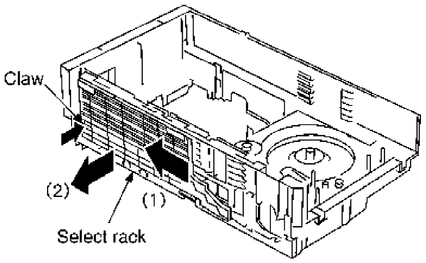

GENEVA gear
Hooks

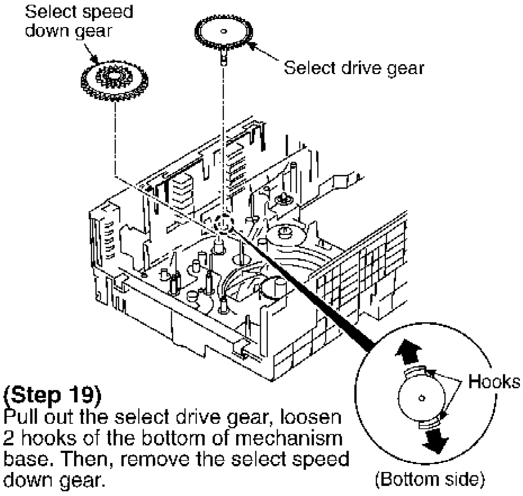
(Bottom side)

(Step 17)
Remove the UD. speed down gear No.1 and UD drive gear.


UD. drive gear
screw
UD. speed down gear No.1

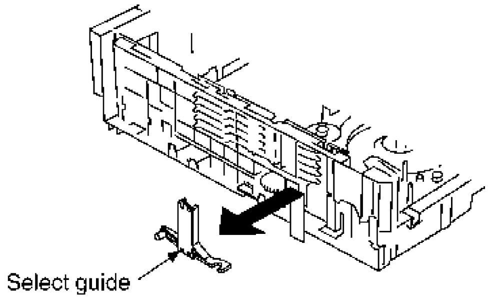
(Step 18)
Slide the select rack to the edge direction of the arrow (1). Push the claw and pull out to arrow (2) while sliding the select rack to the arrow (1).

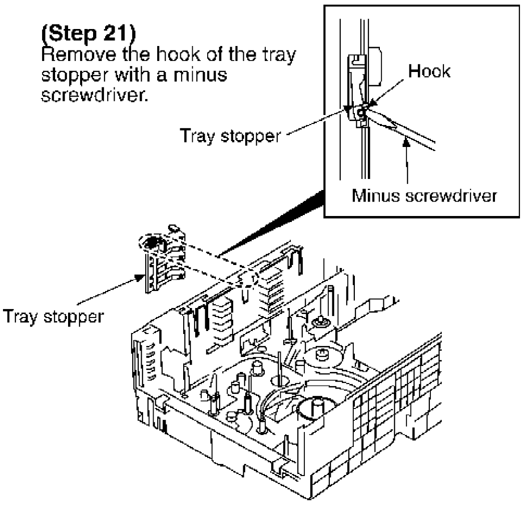

Claw
(2)
(1)
Select rack


Select speed down gear
Select drive gear
Hooks
(Bottom side)

(Step 19)
Pull out the select drive gear, loosen 2 hooks of the bottom of mechanism base. Then, remove the select speed down gear.

(Step 20)
Remove the select guide after sliding upside.

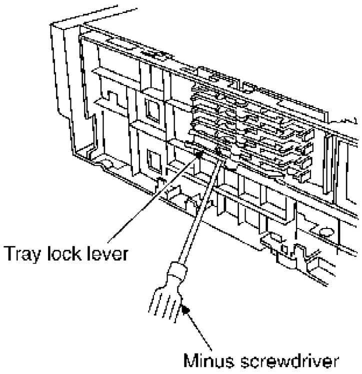

Select guide



(Step 21)
Remove the hook of the tray stopper with a minus screwdriver.

Hook
Tray stopper
Minus screwdriver
Tray stopper

(Step 22)
Remove the bottom of the tray lock lever with a minus screwdriver and others.


Tray lock lever
Minus screwdriver

9.24. CR16 MECHANISM ASSEMBLY PROCEDURE

The following specified greases and/or oil must be applied when some specific parts are changed.

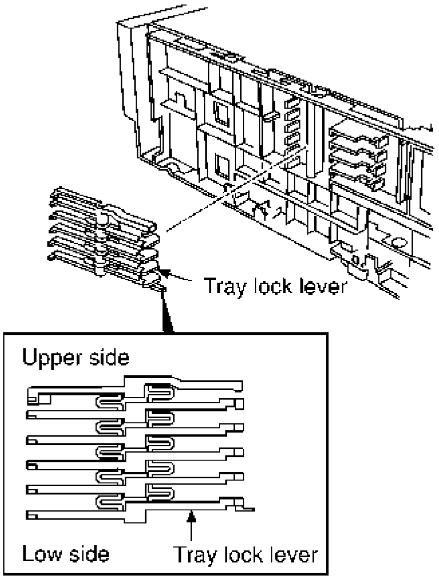
1. **Floil grease (VFK1298) : The floil grease must be applied to tray, tray (L) and tray (R).**
2. **Hanarl oil (VFK1700) : The hanarl oil must be applied to any parts with grease other than the said parts.**

- **Follow the (Step 1) - (Step 6) of Item 9.2.**
- **Follow the (Step 1) - (Step 3) of item 9.3.**
- **Follow the (Step 1) - (Step 4) of item 9.5.**
- **Follow the (Step 1) - (Step 3) of item 9.8.**
- **Follow the (Step 1) of Item 9.9.**
- **Follow the (Step 1) - (Step 2) of Item 9.13.**
- **Follow the (Step 1) - (Step 10) of item 9.23.2.**

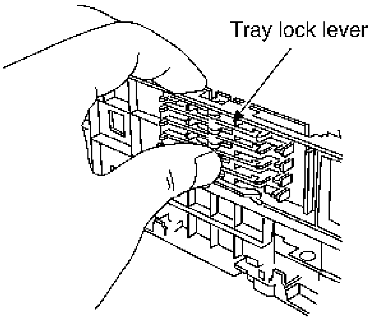
- Follow the (Step 1) - (Step 4) of item 9.23.3.

- Follow the (Step 1) - (Step 22) of item 9.23.4.

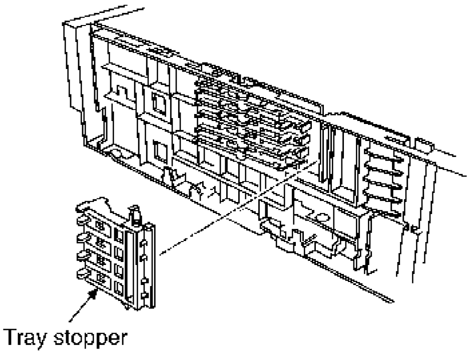
(Step 1)
Install the tray lock lever to mechanism base.


Tray lock lever
Upper side
Low side
Tray lock lever

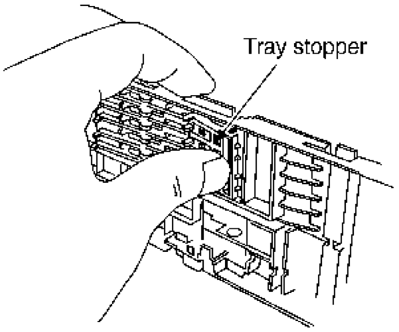
(Step 2)
Push the tray lock lever with a hand and install it.


Tray lock lever

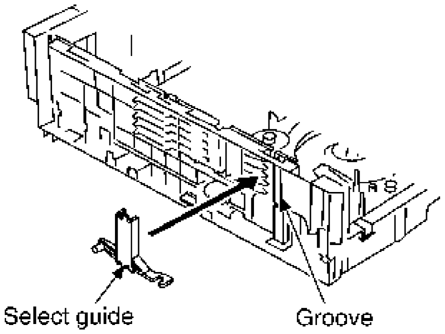
(Step 3)
Install the tray stopper to mechanism bese.


Tray stopper

(Step 4)
Push the tray stopper with a hand and install it.

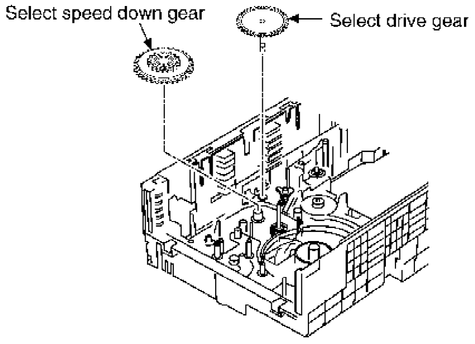

Tray stopper

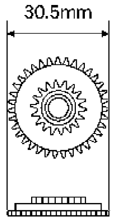
(Step 5)
Insert the select guide with a groove of the mechanism base and move it below.


Select guide
Groove

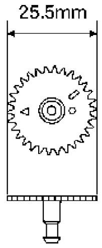
(Step 6)
Install the select speed down gear to mechanism base.

(Step 7)
Install the select drive gear to mechanism base.


Select speed down gear
Select drive gear

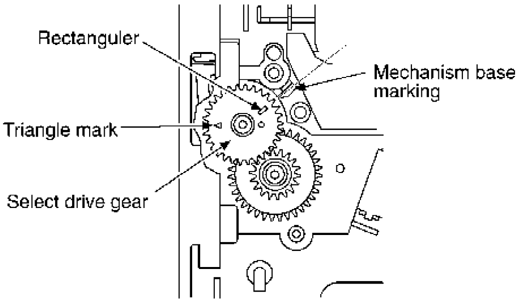


Select speed down gear
(White)



Select drive gear
(White)

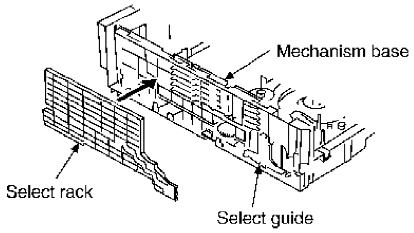
(Step 8)
Fit a mechanism base marking to the rectanguler mark of gear so that the triangle mark can indicate the sideward direction.


Rectanguler
Triangle mark
Select drive gear
Mechanism base marking

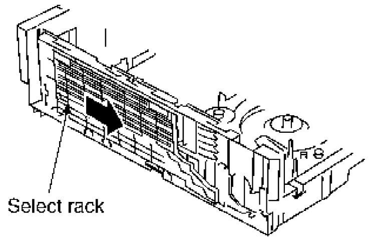
(Step 9)
Install the select rack to mechanism base.
Checking items before the installation.

1. Check select guide is completely in lowest position.
2. Check its phase of select drive gear is correct position.(Rectangle/Trianguler mark)(Refer to Step 8)

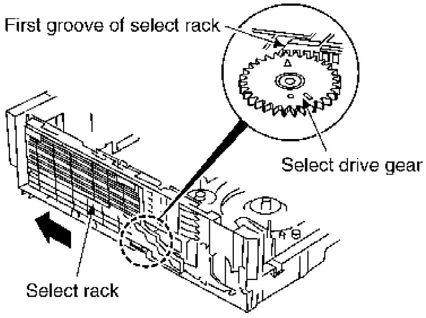
1. Put a select rack down with it fitted to its circumference of mechanism base.


Mechanism base
Select rack
Select guide

2. Slide the select rack with it's pushing to a little right direction and install it.

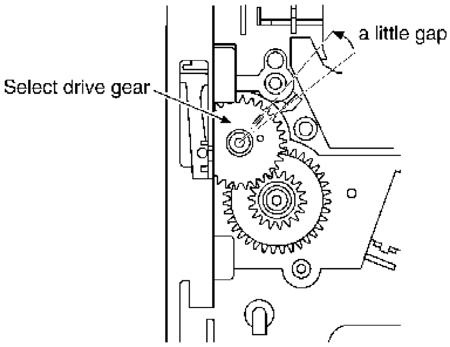

Select rack

(Figure to see from the inside)

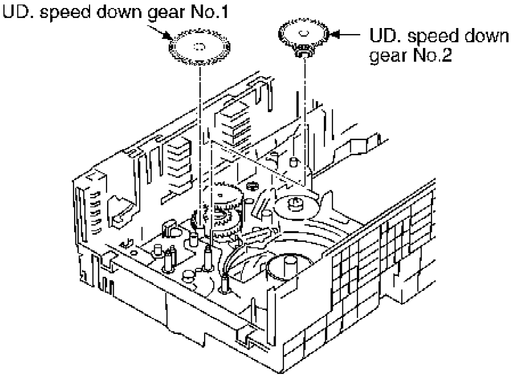

First groove of select rack
Select drive gear
Select rack

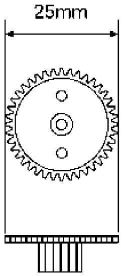
3. Check whether its end of triangular mark is in first groove of select rack, after fixing.
4. After insertion of select rack, continue the following work until the indication that it gose forward. And, all the while it must be checked that select rack is in the extreme end.

5. After insertion the select rack, the marking of select gear has a little gap when it is in the extreme end.

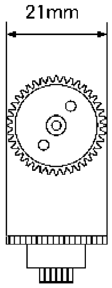

a little gap
Select drive gear

(Step 10)
Install the UD. speed down gear No.1 and UD. speed down gear No.2.


UD. speed down gear No.1
UD. speed down gear No.2

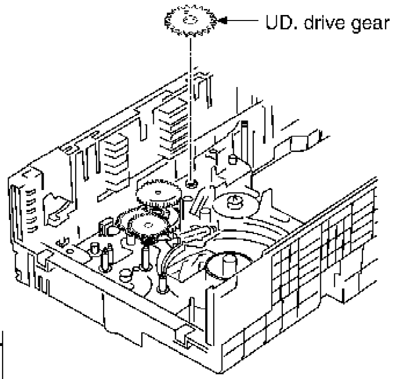


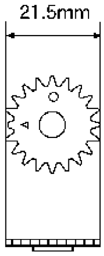
UD. speed down gear No.1
(White)



UD. speed down gear No.2
(Semi-transparent)

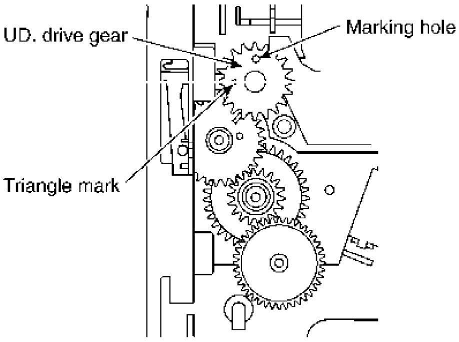
(Step 11)
Install the UD. drive gear to mechanism base.


UD. drive gear

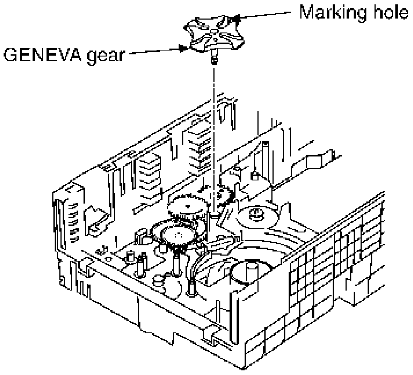


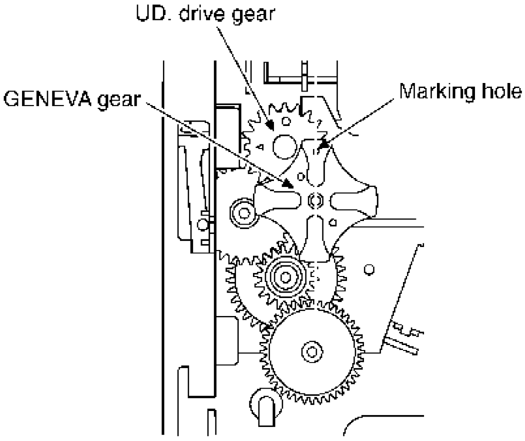
UD drive gear
(White)

(Step 12)
Insert the UD. drive gear with its marking hole upward.
At that time, its triangle mark should be sideways.

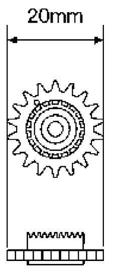

UD. drive gear
Marking hole
Triangle mark

(Step 13)
Insert the GENEVA gear with its marking hole upward, and fix it by 2 hooks on bottom of mechanism base.
At that time, UD. drive gear mustn't be moved.

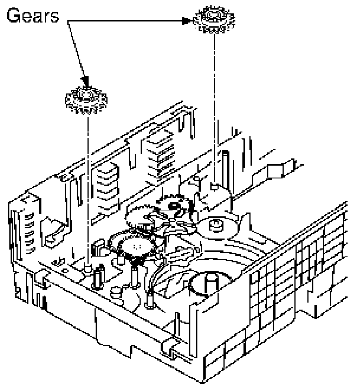

Marking hole
GENEVA gear


UD. drive gear
GENEVA gear
Marking hole

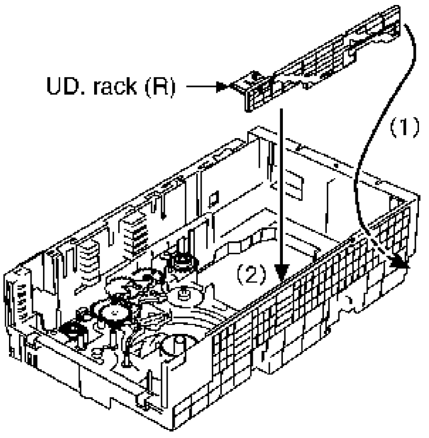
(Step 14)
Install the 2 gears to mechanism base.



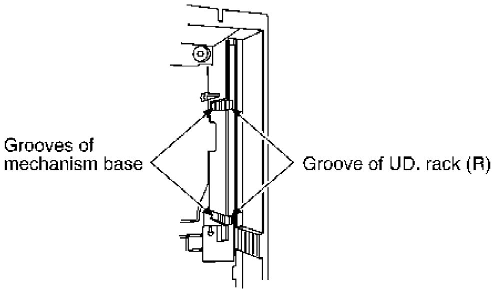
Gear (White)

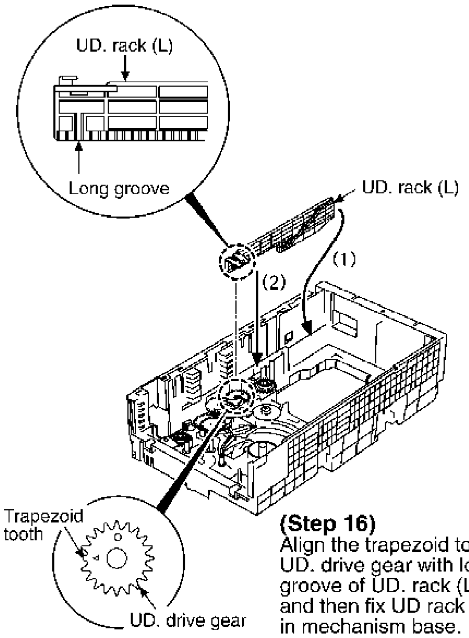


(Step 15)
Insert the UD. rack (R) to (2) from arrow (1).



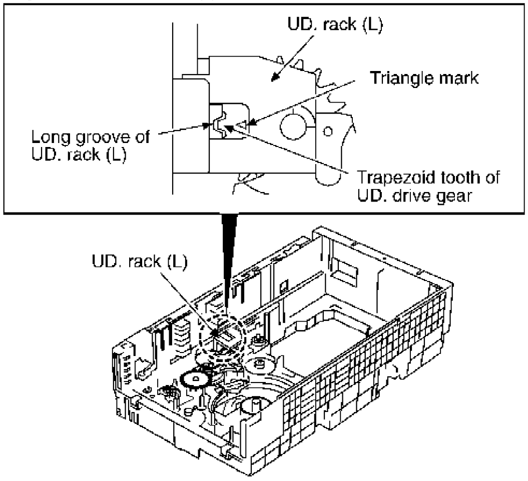
NOTE:
Put a groove of the mechanism base to the UD. rack (R).


Grooves of mechanism base
Groove of UD. rack (R)

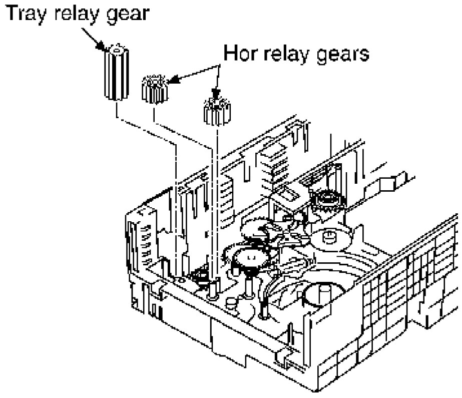

UD. rack (L)
Long groove
UD. rack (L)
(1)
(2)
Trapezoid tooth
UD. drive gear

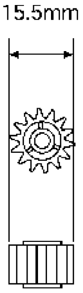
(Step 16)
Align the trapezoid tooth of UD. drive gear with long groove of UD. rack (L), and then fix UD rack (L) in mechanism base.

(Figure to see from the upper side)

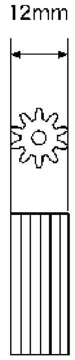

UD. rack (L)
Triangle mark
Long groove of UD. rack (L)
Trapezoid tooth of UD. drive gear
UD. rack (L)

(Step 17)
Install the tray relay gear and 2 hor relay gears.


Tray relay gear
Hor relay gears

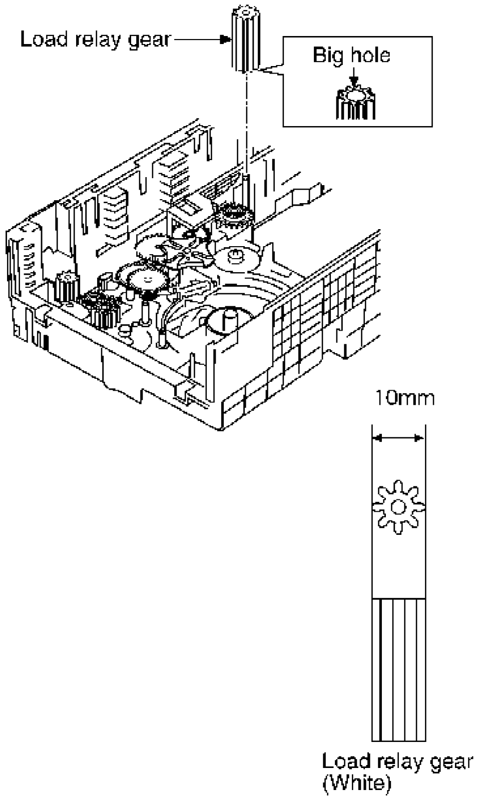


Hor relay gears
(White)

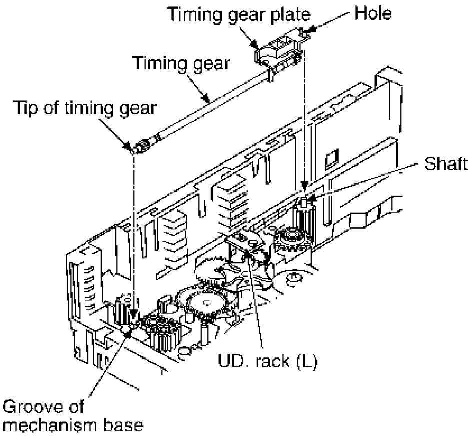


Tray relay gear
(White)

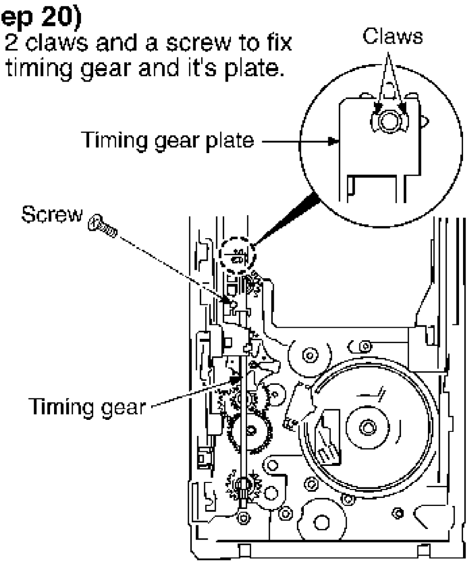
(Step 18)
Install the load relay gear to mechanism base.
(Fit load relay gear with its big hole downward.)


Load relay gear
Big hole
10mm
Load relay gear
(White)

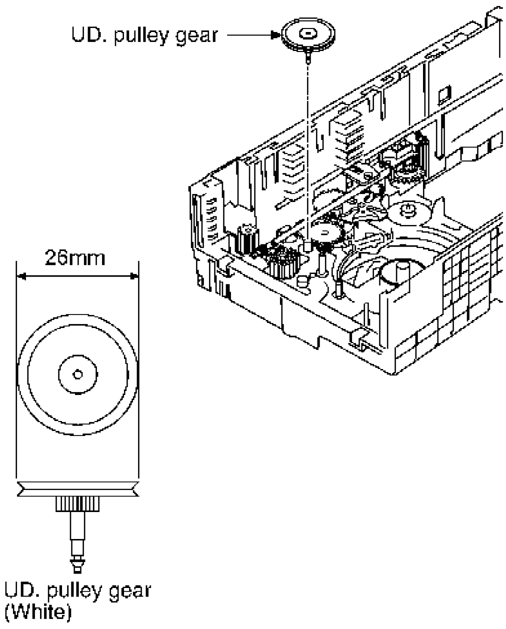
(Step 19)
Put on the top of the timing gear, then, install the timing gear and it's plate.
At that time avoid the UD. rack (L).


Timing gear plate
Hole
Timing gear
Tip of timing gear
Shaft
UD. rack (L)
Groove of
mechanism base

(Step 20)
Fix 2 claws and a screw to fix the timing gear and it's plate.

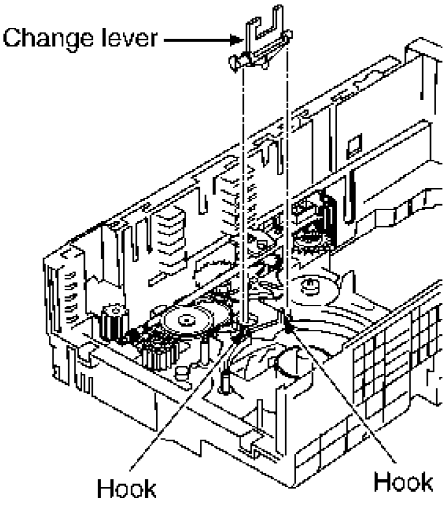

Claws
Timing gear plate
Screw
Timing gear

(Step 21)
Install the UD. pulley gear to mechanism base.


UD. pulley gear
26mm
UD. pulley gear
(White)

(Step 22)

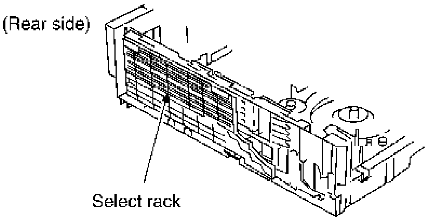
Insert the change lever with it upright.

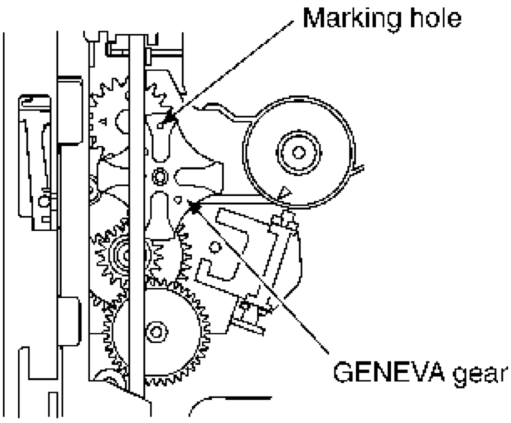

Change lever
Hook
Hook

(Step 23)

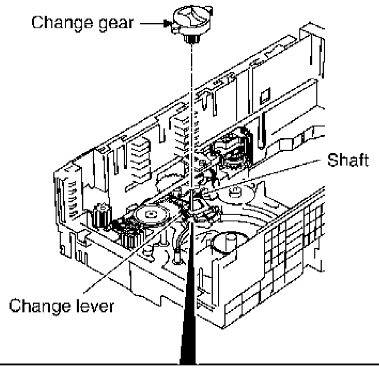
Be sure the notice of bellow before fixing the change gear.

1. Select track should be in the rear of mechanism base.
2. Its hole of GENEVA gear should turn up.

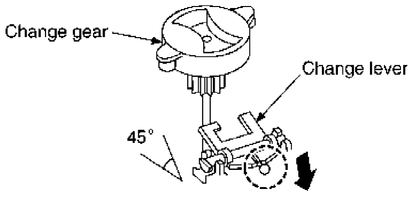

(Rear side)
Select rack


Marking hole
GENEVA gear

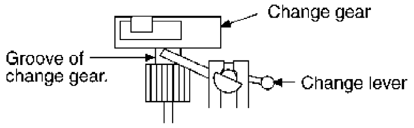
(Step 24)
Install the change gear as insert the change lever into the groove of change gear.


Change gear
Shaft
Change lever

1. Pushing the ○ part and pull up the change lever 45°.

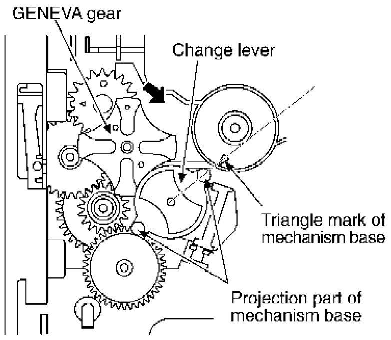

Change gear
Change lever
45°

2. Insert the change lever into the groove of change gear.

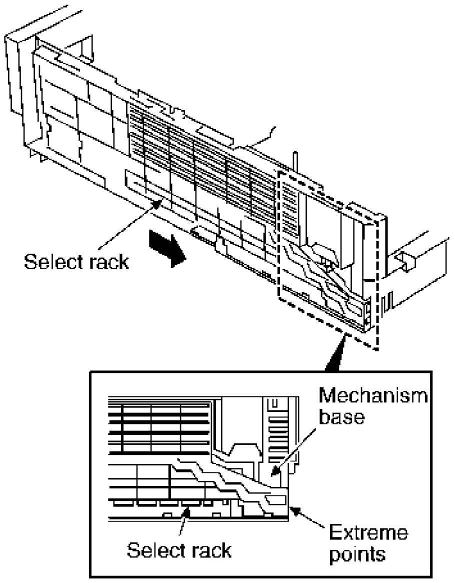

Change gear
Groove of change gear.
Change lever

(Step 25)
Put change gear down with projection part of change gear fitted to triangle mark of mechanism base, when fixing change gear.
At that time, check change gear is inserted into the groove of change lever.

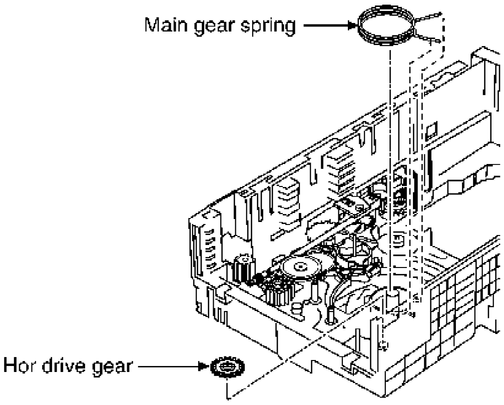
(Step 26)
Lastly, turn GENEVA gear clockwise slightly and drop change gear to mechanism base.

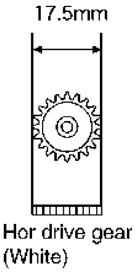

GENEVA gear
Change lever
Triangle mark of mechanism base
Projection part of mechanism base

(Step 27)
Move the select rack smoothly forward manually until 2 extreme points of both select track and mechanism base.

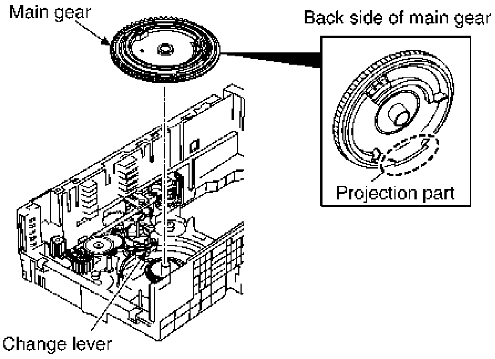

Select rack
Mechanism base
Select rack
Extreme points

(Step 28)
Install the main gear spring and hor drive gear.

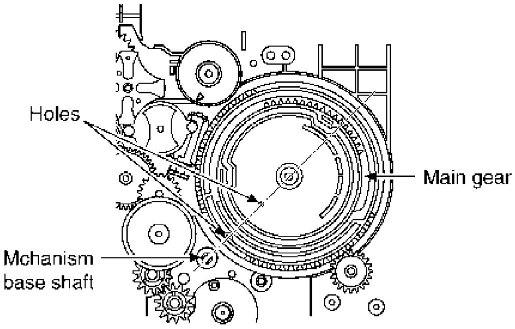

Main gear spring
Hor drive gear


17.5mm
Hor drive gear
(White)

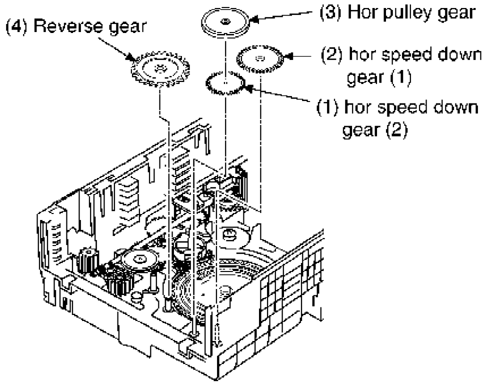
(Step 29)
Don't bring change lever into touch to projection part of main gear, when fixing main gear in mechanism base.

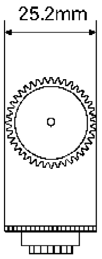

Main gear
Back side of main gear
Projection part
Change lever

(Step 30)
After that, turn main gear so that 2 holes inside main gear would be in alignment with mechanism base.

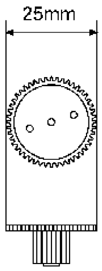

Holes
Main gear
Mchanism base shaft

(Step 31)
Install the hor speed down gear (2), hor speed down gear (1), hor pullry gear and reverse gear.

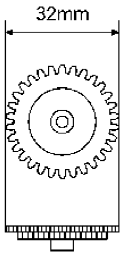

(4) Reverse gear
(3) Hor pulley gear
(2) hor speed down gear (1)
(1) hor speed down gear (2)



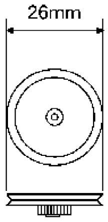
Hor speed down gear (2) (White)



Hor speed down gear (1) (Semi-transparent)



Reverse gear (White)

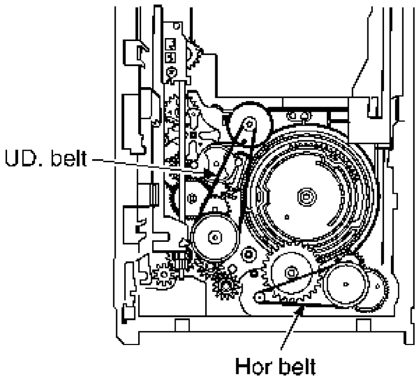


Hor pulley gear (White)

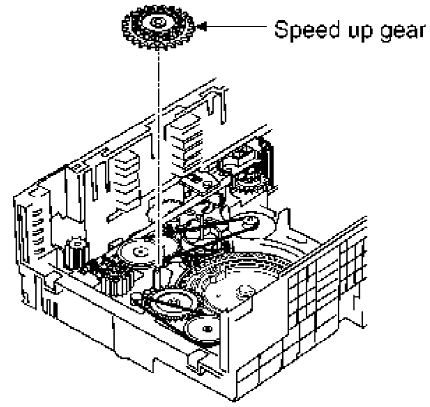
(Step 32)
Install the UD. belt and hor belt.

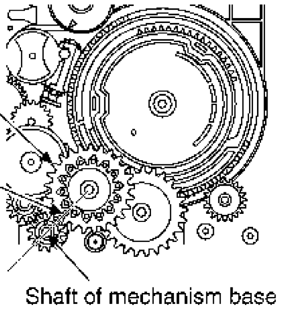
NOTE:

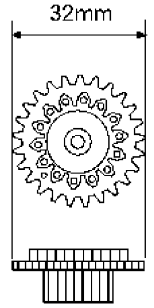
1. Take care not apply the grease to the belt.
2. Install the belt without twist.


UD. belt
Hor belt

(Step 33)
Install speed up gear to its shaft of mechanism base with 2 fitting.


Speed up gear

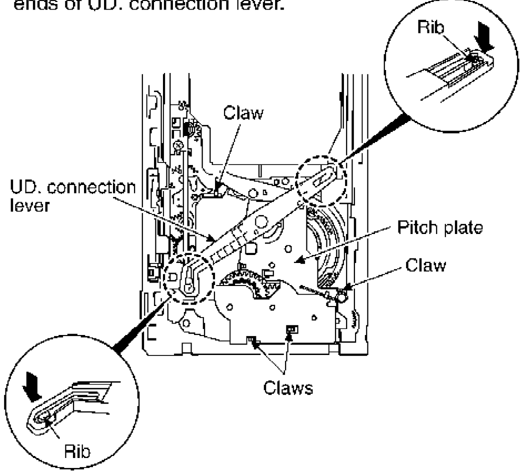

Speed up gear
Hole
Shaft of mechanism base



Speed up gear
(White)

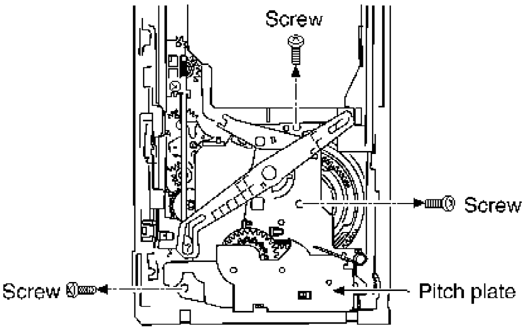
(Step 34)
Install the pitch plate. (The 4 claws should be latched.)

(Step 35)
Fix 2 ribs of UD. rack (L) and (R) into groove of both ends of UD. connection lever.


Rib
Claw
UD. connection lever
Pitch plate
Claw
Claws
Rib

(Step 36)

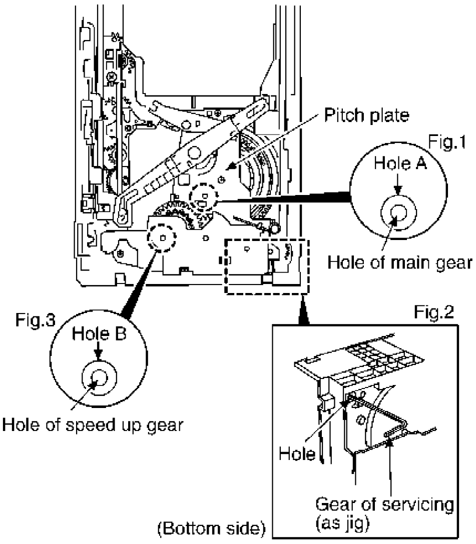
Fixed it by three screws further.


Screw
Screw
Screw
Pitch plate

(Step 37)

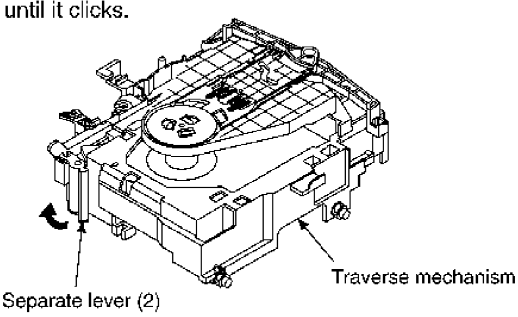
Be sure the notice of below before fixing the traverse mechanism.

1. Check that 2 holes of both pitch plate and main gear is fitted. (Refer to Fig.1)
   If it's not fitted, put the gear for servicing in the hole of the bottom side and adjust it. (Refer to Fig.2)
2. Check that 2 holed of both pitch plate and speed up gear is futted. (Refer Fig.3)
   If it's not fitted turn the speed up gear to adjust it.

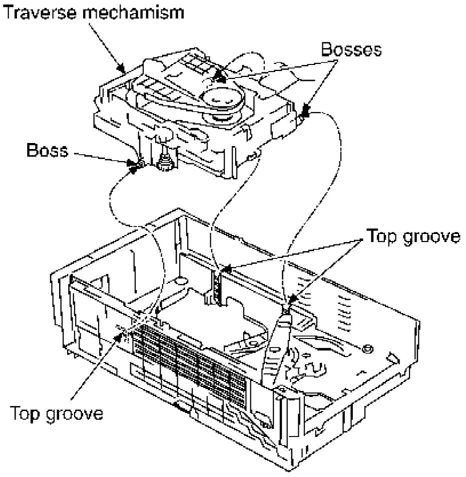

Pitch plate
Fig.1
Hole A
Hole of main gear
Fig.3
Hole B
Hole of speed up gear
Fig.2
Hole
Gear of servicing (as jig)
(Bottom side)

(Step 38)

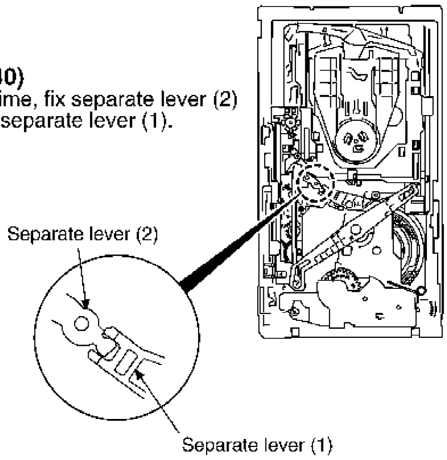
Turn the separate lever (2) slowly toward left side until it clicks.


Traverse mechanism
Separate lever (2)

(Step 39)
Fix the left boss into the top groove of the UD. rack (L) and fix 2 bosses into the groove of the UD. rack (R).

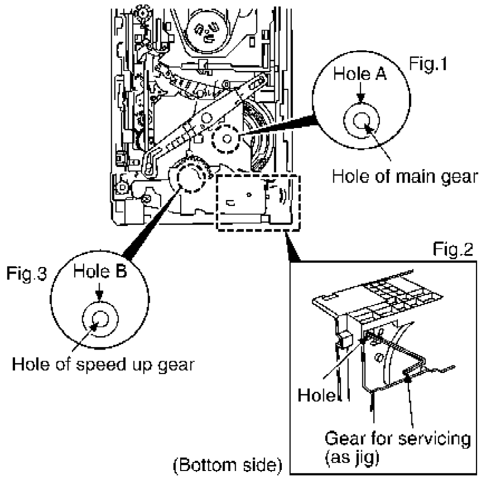

Traverse mechamism
Bosses
Boss
Top groove
Top groove

(Step 40)
At that time, fix separate lever (2) into the separate lever (1).

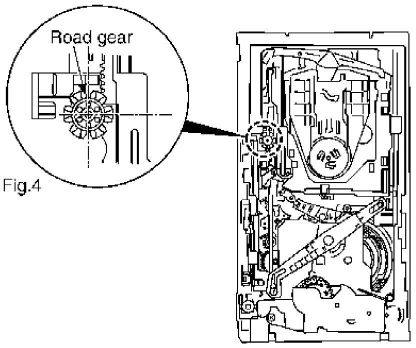

Separate lever (2)
Separate lever (1)

(Step 41)
After the traverse mechanism fixed,
confirm the phase in order below.

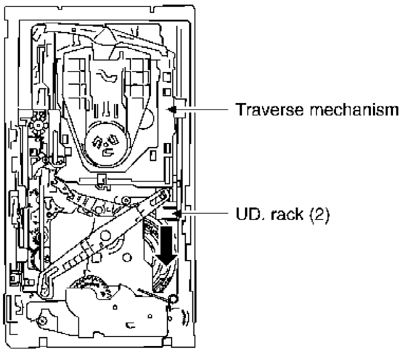
1. Check that 2 holes of both pitch plate and main gear is fitted. (Refer to Fig.1)
   If it's not fitted, put the gear for servicing in the hole of the bottom side and adjust it. (Refer to Fig.2)
2. Check that 2 holed of both pitch plate and speed up gear is futted. (Refer Fig.3)
   If it's not fitted turn the speed up gear to adjust it.


Hole A
Fig.1
Hole of main gear
Fig.2
Fig.3
Hole B
Hole of speed up gear
Hole
Gear for servicing
(as jig)
(Bottom side)

3. In the cog of road gear, the groove with it's cutting halfway set side ward. (Refer to Fig.4)
   Remove the traverse mechanism again when it is not set side ward and install it after adjustment of inserting position.
   NOTE: By this time, do not adjust to rotate the road gear.

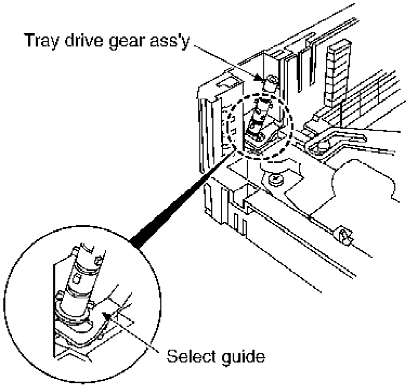

Road gear
Fig.4

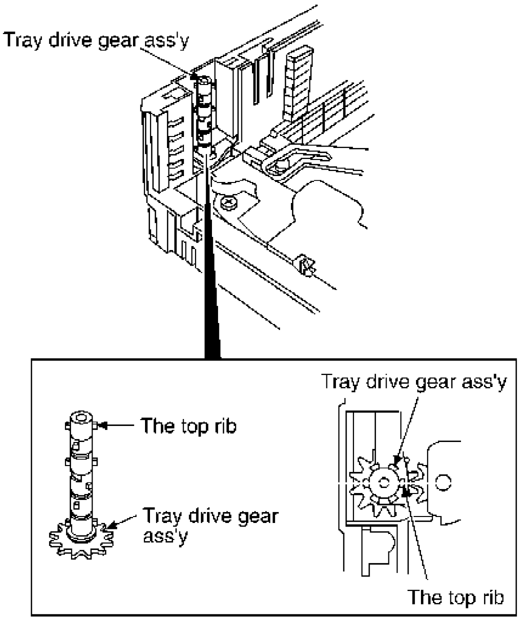
(Step 42)
After insertion of traverse mechanism, pull the UD. rack (R) on this side that each phase is "OK" and then lock the traverse mechanism.


Traverse mechanism
UD. rack (2)

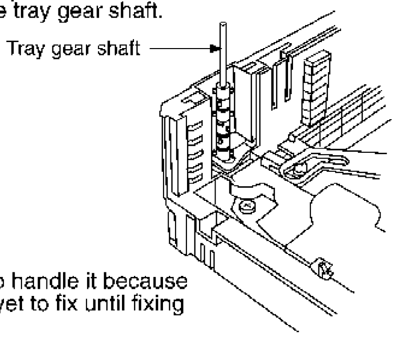
(Step 43)
Install the tray drive gear to select guide.
(Install the top rib of the tray drive gear with side ward.)

NOTE:
Confirm the each phase surely before install the tray drive gear. (Refer to Step 41).


Tray drive gear ass'y
Select guide

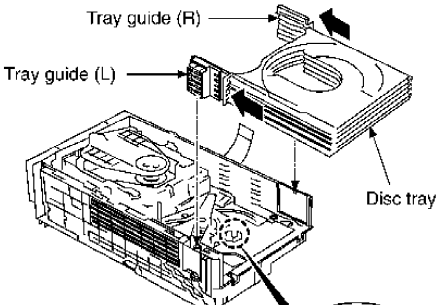

Tray drive gear ass'y
Tray drive gear ass'y
The top rib
Tray drive gear ass'y
The top rib

(Step 44)
Insert the tray gear shaft.


Tray gear shaft

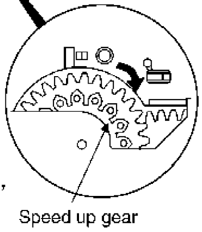
NOTE:
Be careful to handle it because the shaft is yet to fix until fixing top cover.

(Step 45)
Move the tray guide (R) and (L) to direction of arrow that fixed (stopped) it and install 5 pieces of disc tray.


Tray guide (R)
Tray guide (L)
Disc tray

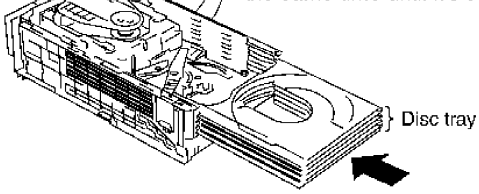
(Step 46)
Confirm that when the disc tray insert the upper side, the speed up gear is rotate clockwise a little.

- When the rotation of speed up gear is not clockwise or rotate, repeat from Step 45.
- Until the speed up gear rorate, repeat from Step 45 and 46.


Speed up gear

NOTE:
While keeping all postion, install 5 pieces of disc tray.

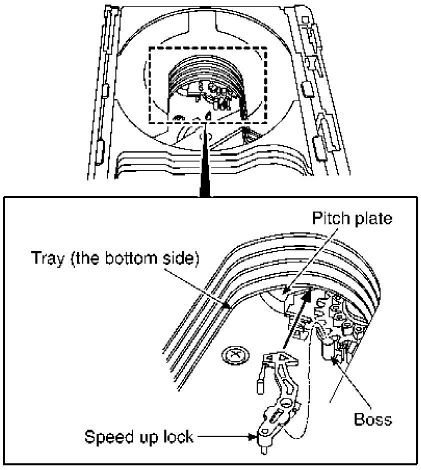
(Step 47)
Insert 5 pieces of disc tray at the same time until it's stop.



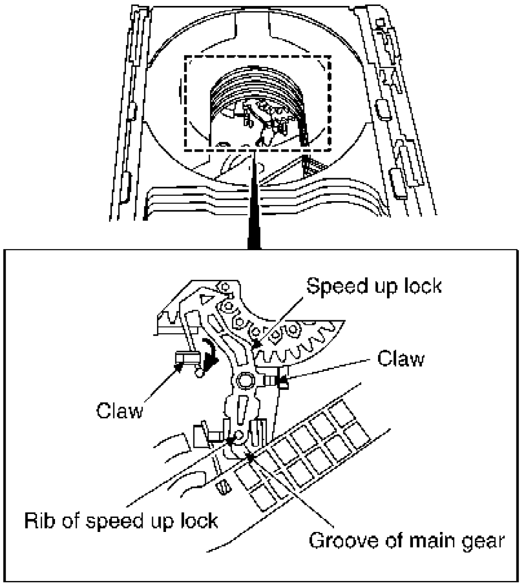
(Step 48)
Turn the traverse side 180°.

(Step 49)
While install the tip of speed up lock beween tray (No.1) of the most lower side and pitch plate for the time being.
(Do not to insert the cog of speed up gear), insert it to boss.

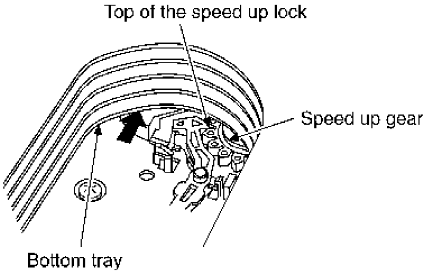
NOTE:
At that time, do not move the tray.
(See the tray the most front side)


Pitch plate
Tray (the bottom side)
Boss
Speed up lock

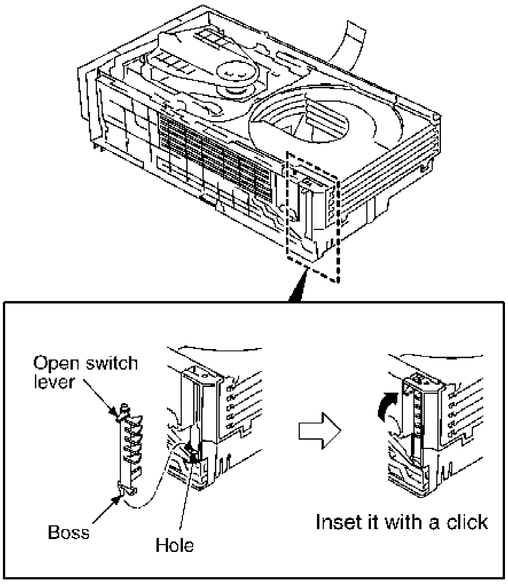
(Step 50)
Insert the rib of speed up lock into a groove of main gear, and lock it with 2 claws.


Speed up lock
Claw
Claw
Rib of speed up lock
Groove of main gear

(Step 51)
Move the bottom tray to the arrow while pushing the top of the speed up gear. And insert it to a cog of the speed up gear.

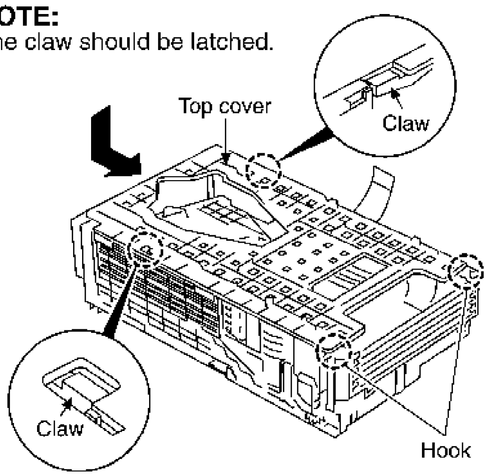

Top of the speed up lock
Speed up gear
Bottom tray

(Step 52)
Install the open switch lever.
(Put the boss into the hole of the mechanism base.)


Open switch lever
Boss
Hole
Inset it with a click

(Step 53)
Install the top cover.
Fix it into hooks and slide direction to the arrow.

NOTE:
The claw should be latched.


Top cover
Claw
Claw
Hook

9.25. Disassembly of traverse mechanism

- Follow the (Step 1) - (Step 6) of Item 9.2.

- Follow the (Step 1) - (Step 3) of Item 9.3.

- Follow the (Step 1) - (Step 4) of Item 9.5.

- Follow the (Step 1) - (Step 3) of Item 9.8.

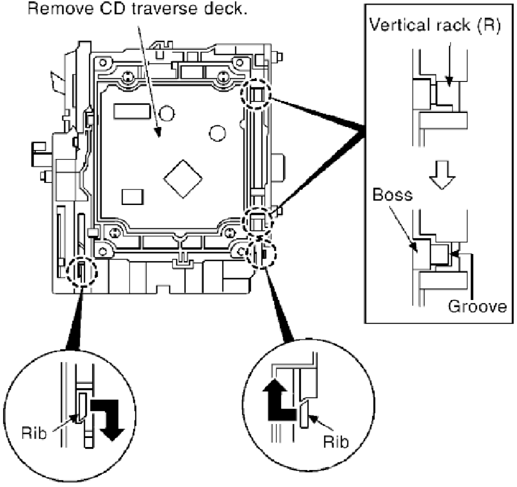
- Follow the (Step 1) of Item 9.9.

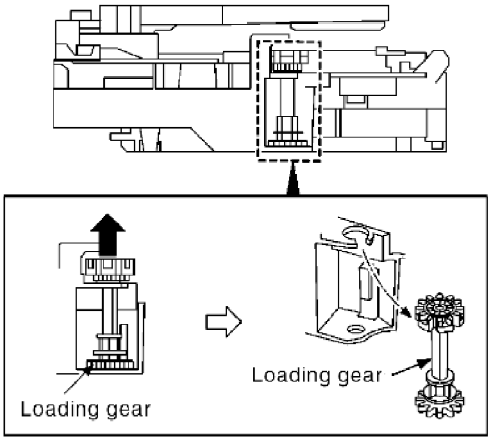
- Follow the (Step 1) - (Step 2) of Item 9.13.

- Follow the (Step 1) - (Step 2) of Item 9.19.

Step 1
Shift ribs of both side to the arrow direction.
(A vertical rack (R) slides and groove opens)

Step 2
Remove CD traverse deck.

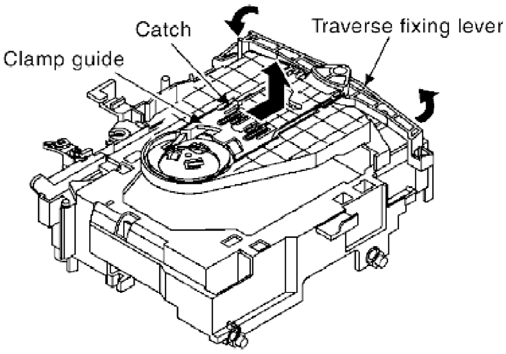

Vertical rack (R)
Boss
Groove
Rib
Rib

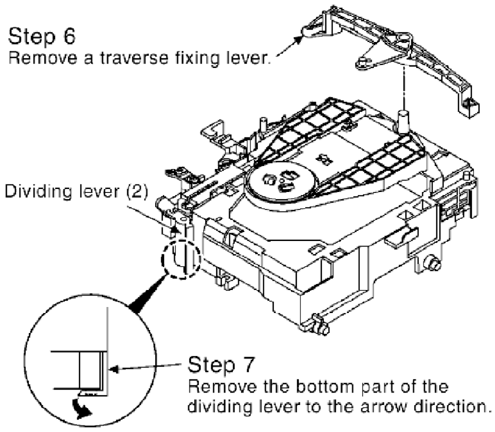

Loading gear
Loading gear

Step 3
Lift a loading gear slightly and pull out.

Step 4
Fixing lever to the arrow direction, rotate a traverse.

Step 5
Remove catch and take out a clamp guide.

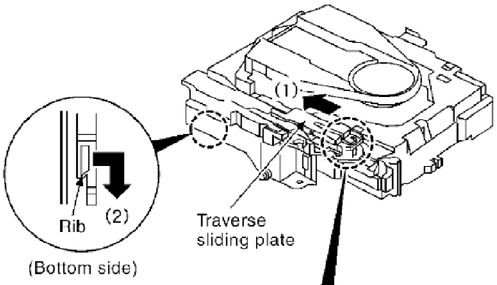

Catch
Traverse fixing lever
Clamp guide


Dividing lever (2)

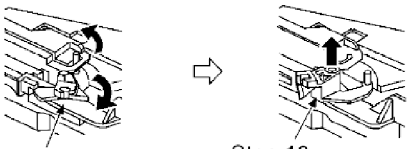
Step 6
Remove a traverse fixing lever.

Step 7
Remove the bottom part of the dividing lever to the arrow direction.

Step 8
Slide a traverse sliding plate to the arrow direction (1), and shift a rib to the arrow direction (2).

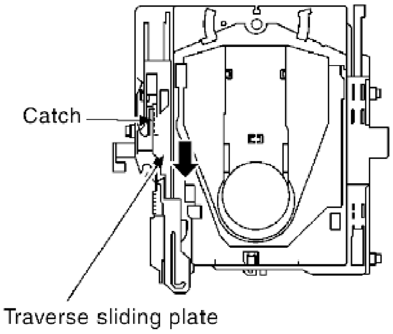

(1)
Rib
(2)
(Bottom side)
Traverse sliding plate

Step 9
Shifting a traverse sliding plate slightly and rotate a tray change lever.


Tray change lever

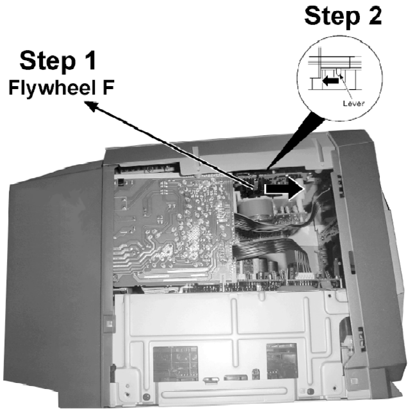
Step 10
Remove a tray change lever.

Step 11
Holding the catch down, slide a traverse sliding plate to the arrow direction and remove it.


Catch
Traverse sliding plate

9.26. Handling of cassette tape jam

- Follow the (Step 1) - (Step 6) of Item 9.2.


Step 2
Step 1
Flywheel F
Lever

Step 1 : If the cassette tape is not ejected due to twinng around capstan or pinch roller during playing or recording, rotate a flywheel F to the arrow direction to remove twined tape.
Step 2 : Push the lever to the arrow direction, open the cassette cover and take out the cassette tape.

10. Service Positions

10.1. Checking procedure

Note : For the disassembling procedure, see the section 9.

10.2. Checking the major P.C.B.

1. Disassembly of Side Panel L & R

2. Disassembly of Top Cabinet

3. Disassembly of Deck Mechanism

4. Disassembly of Front Panel

5. Disassembly of Panel P.C.B., Headphone P.C.B. and Switch P.C.B.

6. Disassembly of Tact Switch P.C.B.

7. Disassembly of Rear Panel P.C.B.

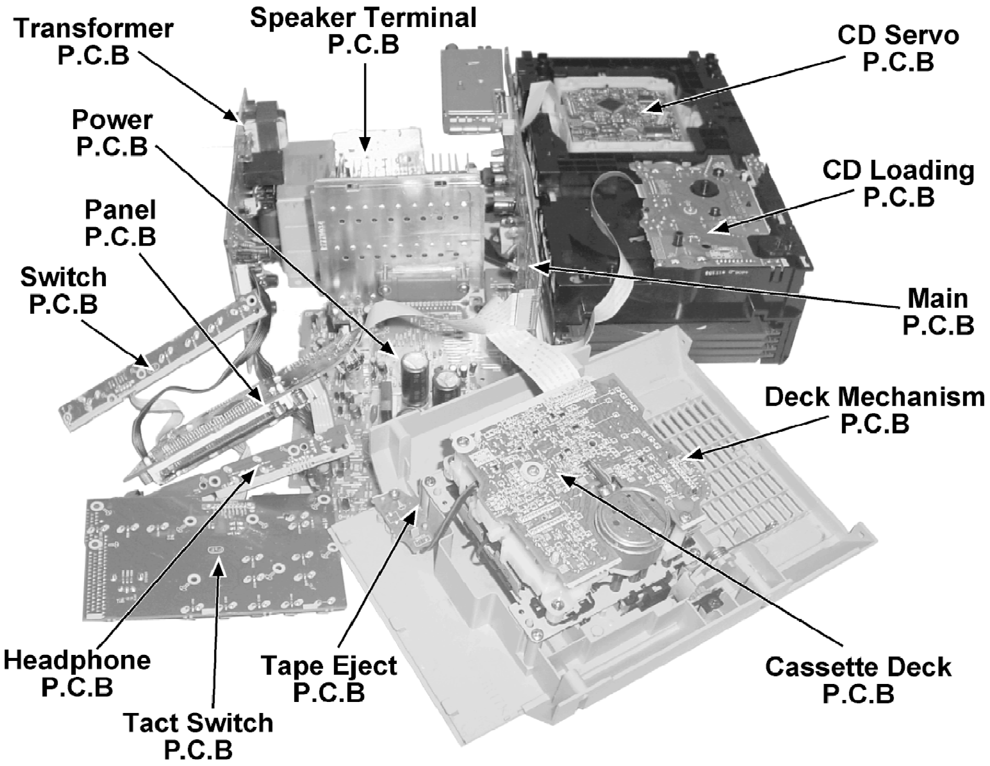
8. Disassembly of Main P.C.B.

9. Disassembly of Transformer P.C.B.

10. Disassembly of Speaker Terminal P.C.B.

11. Disassembly of Power P.C.B.

12. Disassembly of CR16 Mechanism


Transformer P.C.B
Speaker Terminal P.C.B
CD Servo P.C.B
Power P.C.B
CD Loading P.C.B
Panel P.C.B
Switch P.C.B
Main P.C.B
Deck Mechanism P.C.B
Headphone P.C.B
Tape Eject P.C.B
Cassette Deck P.C.B
Tact Switch P.C.B

11. Self-Diagnostic Display Function

This unit is equipped with a self-diagnostic display function, which will be useful during servicing and maintenance.

- Refer to the next page for display symbols, symptoms, etc.

11.1. Preparations

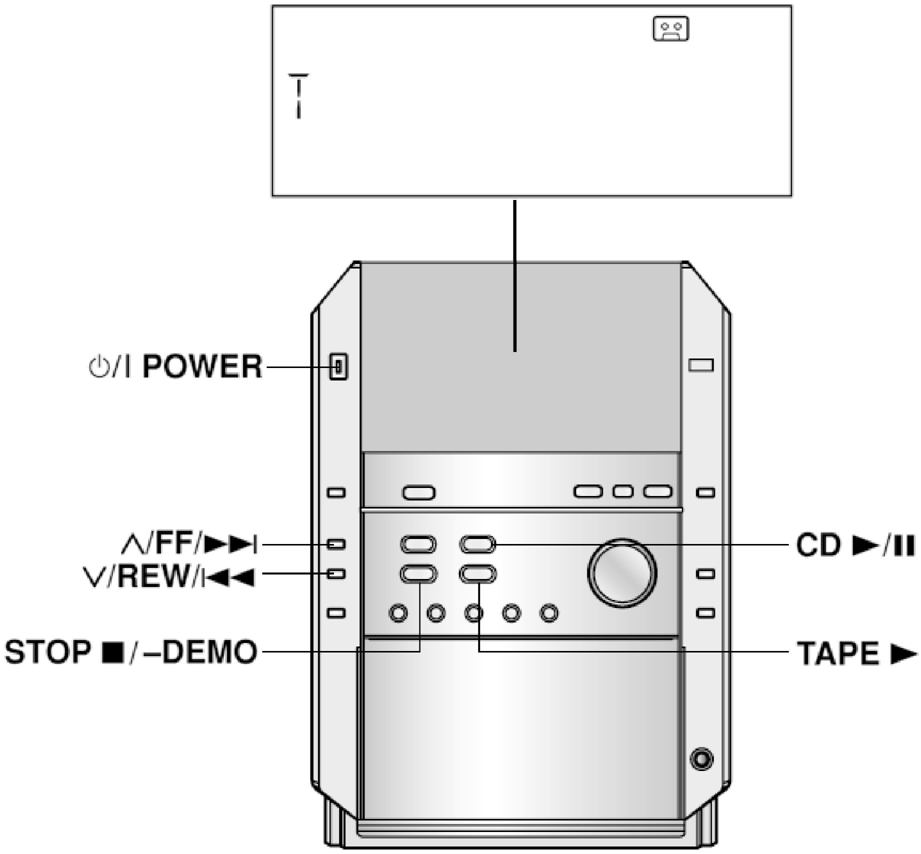
1. **A Cr02-positioned blank cassette tape with an erase prevention niche on either Side A or B.**
2. **A normal-positioned music tape with erase prevention niches on both Sides A and B. Both tapes are halfway forwarded in advance.**
3. **The remote controller that comes with this unit.**

11.2. Setting of the Self-Diagnostic Mode

No.	Operation Procedure	Operation and Processing of Microcompute
1	Switch the SELECTOR to TAPE ▶ . There should be NO cassettes loaded.	
2	Press the [STOP ■ /-DEMO] key for 2 sec and press [∧ /FF/ ▶▶I] for another 2 sec, it shall enter into the self-diagnostic mode.	[T] shall be displayed in the FL.

11.3. Restoring Normal Display

- From the F76 display, the normal display does not appear till an error is recovered.
- For displays other than F76, press “POWER” button to turn off the power, and then turn on the power.



11.4. Clearing Self-Diagnostic Memory

<CD Section> (F15, F17, F22, F26, F27, F28, F29)

1. Enter a self-diagnostic mode.

2. Press "STOP ■ /-DEMO" button. A symbol of self-diagnostic is indicated on the display if an error is found. If several errors are found, a respective indication is displayed when "STOP ■ /-DEMO" button is pressing repeatedly. (e.g. H01 → CD F15 → F01) If no error is found, only "T " indication is displayed and remains unchange even if "STOP ■ /-DEMO" button is pressed.

11.5. Displaying Self-Diagnostic Results

<Cassette Deck Section> (H01, H02, H03, F01, F02)

1. Enter the self-diagnostic mode, following the instructions described in [11.2. Entering Self-Diagnostic Mode].
2. Insert a normal-positioned music tape with erase prevention niches on both Sides A and B. Press [TAPE ▶] button to activate the TPS operation so that the tape automatically stops at an interval between music selections.
3. Press [STOP ■ /-DEMO] and [TAPE ▶] buttons together on the remote controller. (Recording does not start.)
4. Then, insert a Cr02-positioned blank cassette tape with an erase prevention niche of Side A or B set to the left side.
5. Press [∧ /FF/ ▶▶|] button. The tape will be forwarded and automatically stop after two seconds.
6. Remove the cassette tape, and set the other side.
7. Press [∨ /REW/ |◀◀] button. The tape will be rewound and automatically stops after two seconds.
8. Press [STOP ■ /-DEMO] button on the unit.
   If an error is found, a self-diagnostic key appears on the display. If several errors are found, the display shows these keys when [STOP ■ /-DEMO] button is pressed repeatedly. (Ex.: H01 - H02 - F01 - H01)
   If no error is found, only the message, “CD TEST” appears on the display.

(*1) TPS operation (music search) detects the blank sections between music selections. Therefore, do not use tapes with the following conditions:

- **A blank section that lasts only 4 seconds or less.**
- **No blank sections (recording through microphones, etc.).**
- **Music selections that have extremely low pitches or prolonged silent sections (such as classical music).**
- **and/or Music recorded with fade in/out effect.**

11.5.1. Error detection for CD Block

Error Code	Abnormal Items	Possible Cause
F15	CD REST SW abnormal	CD traverse position intial setting operation failsafe counter waiting for REST SW to turn on. Error No. shall be clear by f during coldstart.
H15	The CD tray closes	CD disc tray detect switch NG. (Check and replace)
F26	CD servo LSI command signal abnormal	CD function DTMS command, after system setting, If SENSE cannot be detected. Memory shall contain F26 code. After P CD function shall continue, error shall occur “NO DISC”. Error No. shall be clear by force or coldstart.
F28	DISC LOAD abnormal	While going to play position, if failsafe counter is finished ar o change or switch target condition was not achieve, this er be memorized. Next time mechanism operates, it shall do co Error No. shall be clear by force or coldstart.
F29	DISC unload abnormal	While going to play position, if failsafe counter is finished ar no change or switch target condition was not achieve, this e be memorized. Next time mechanism operates, it shall do co Error No. shall be clear by force or coldstart.
F27	Slide operation abnormal	During vertical operation, if failsafe timer is finished and swi change or switch target condition was not achieve, this erro memorized. Next time mechanism operates, it shall do colds No. shall be clear by force or coldstart.
F17	Down SW abnormal	During vertical operation going to the bottom position, if fail is finished and switch no change or switch target condition achieve, this error shall be memorized. The Next time mecha operates, it shall do mechanism initialization.Error No. shall by force or coldstart.
F22	Loading Mode / Mecha abnormal	During mecha initialization, Loading mode mechanism abno normal operation cannot be achieve. The next time mechani operates, it shall do mechanism initialization.Error No. shall by force or coldstart.
Abnormal item	Error Display	Method of detection
F75	CD power abnormal	Under normal operation (self-diagnostic mode inclusive), ch CDRST is H for SELECTOR at CD. If it is not H after 1 sec, it memorised as an error.

11.5.2. Error detection code for Cassette Mechanism Block

Error Code	Abnormal Items	Possible Cause
H01	MODE SW abnormal	Normal operation during mecha transition, MODE SW abno memorised. The content of abnormality can be confirmed i abnormal detection mode explained in the later section.
H02	REC INH SW abnormal	The content of abnormality can be confirmed in the abnorm detection mode explained in the later section.
H03	HALF SW abnormal	
F01	Reel pulse abnormal	
F02	TPS abnormal	

11.5.3. Doctor Mode set up

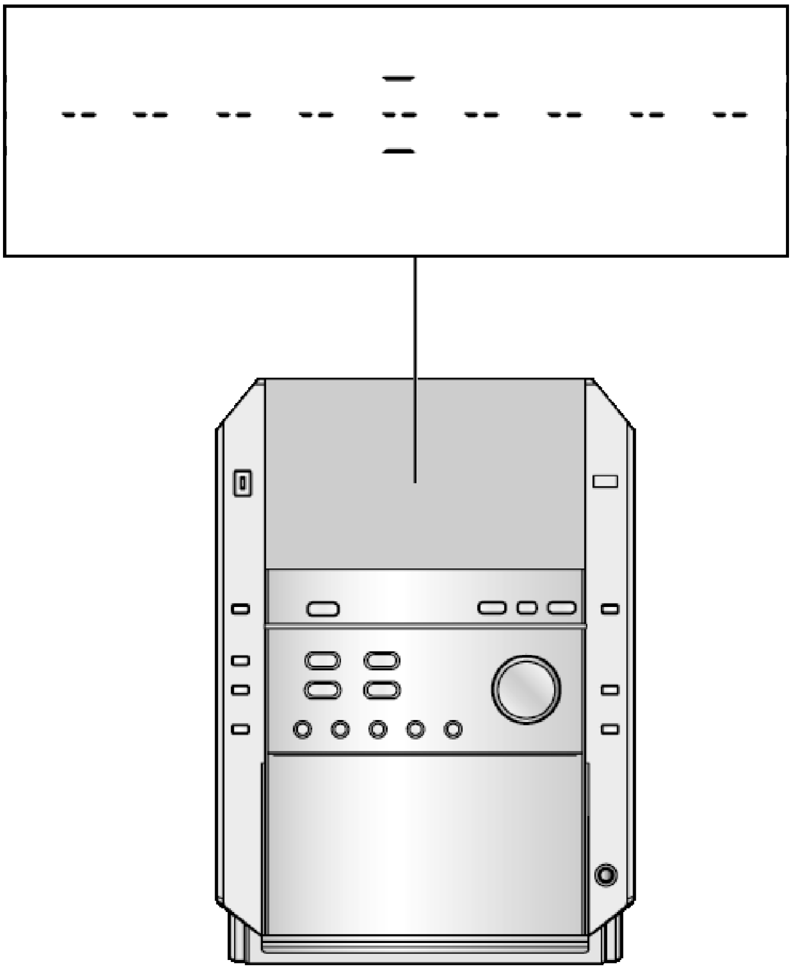
a) At any more (CD, TAPE, TUNER).

b) To enter Doctor Mode, press Doctor Mode key [C2DF] of special remote control or input 4 then 7 from the remote control while pressing STOP ■ key of the main set.

11.5.4. Cold start setting

1. Doctor mode ON.
2. Remote control SLEEP -AUTO OFF- key ON.

- Data shall be set in order to make a cold start (backup data are initialized) when reset starts next time. To clarify that the code was accepted at this time, The pattern below is displayed in the LCD for 2 seconds.



(Note) In the case that you unplug from AC outlet after this mode was set, then plug to AC again, a cold start shall begin. / And "- - - - - - - - -" is displayed in the FL for 2 seconds.

12. Procedure for Checking Operation of Individual Parts of Cassette Mechanism Unit

12.1. Operation Check with Cassette Tape

1. **Pull up the EJECT lever using a rubber band. (Cf. Fig. 6)**
2. **Supply DC5V to MOTOR. (→ MOTOR rotates.) (Cf. Fig. 5)**
3. **Insert a cassette tape to the unit.**
4. **Supply DC9V to the plunger, and turn the power ON and OFF. (→ Power +PL, -PL) (Cf. Fig. 5)**
   - **A. FWD PLAY: Supply the plunger power in a flash. (ON: approx. 5msec)**
   - **B. FWD FF: Supply the plunger power in a flash at PLAY mode. (ON: approx. 5msec)**

C. STOP: Supply the plunger power in a flash at FWD FF mode. (ON: approx. 5msec)

D. REV PLAY: Supply the plunger power in a normal timing at STOP mode. (ON: approx. 200msec)

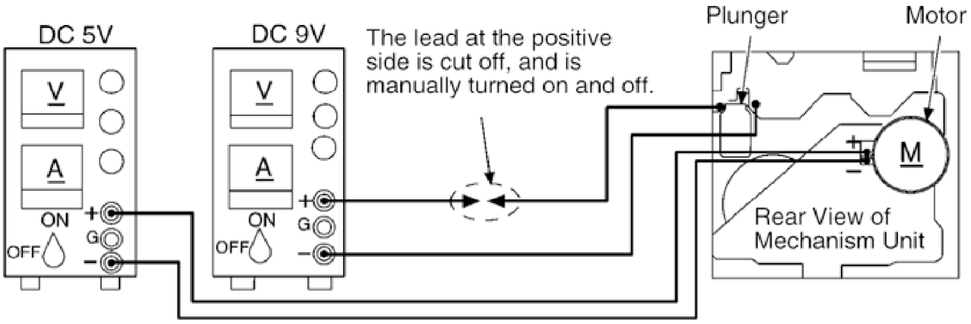
E. REV REW: Supply the plunger power in a flash at REV PLAY mode. (ON: approx. 50msec)

F. STOP: Supply the plunger power in a flash at FF mode. (ON: approx. 50msec)

Repeat the operation (→ FWD PLAY)

(Note) Other operation may start if a timing of supplying the plunger power is missed.

12.1.1. Connection Status between Mechanism and Power Supply (Motor, Plunger)

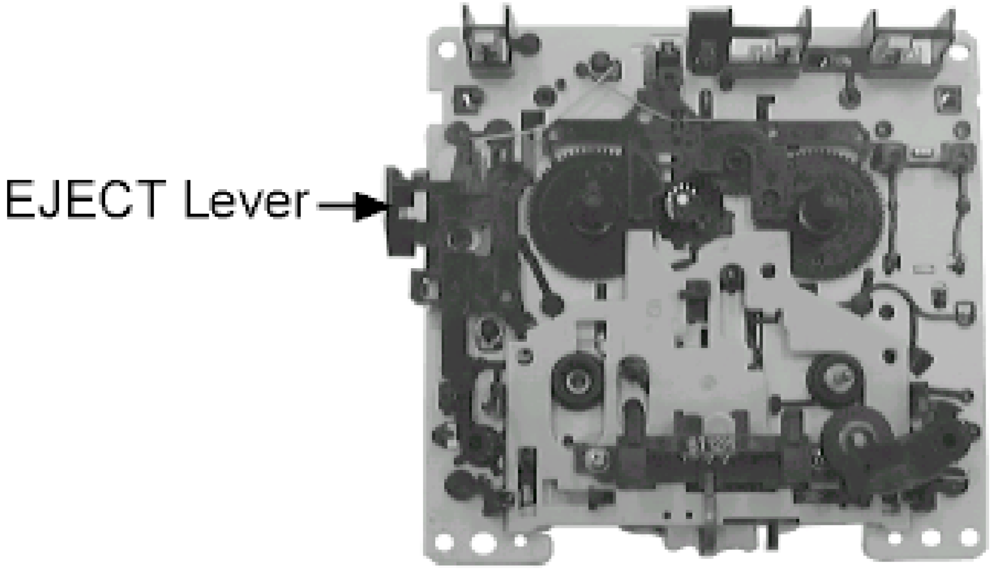


The lead at the positive side is cut off, and is manually turned on and off.

Fig. 5

12.1.2. Operative Parts of Mechanism Unit (EJECT lever fitted with rubber band, / Plunger/Rib operation)

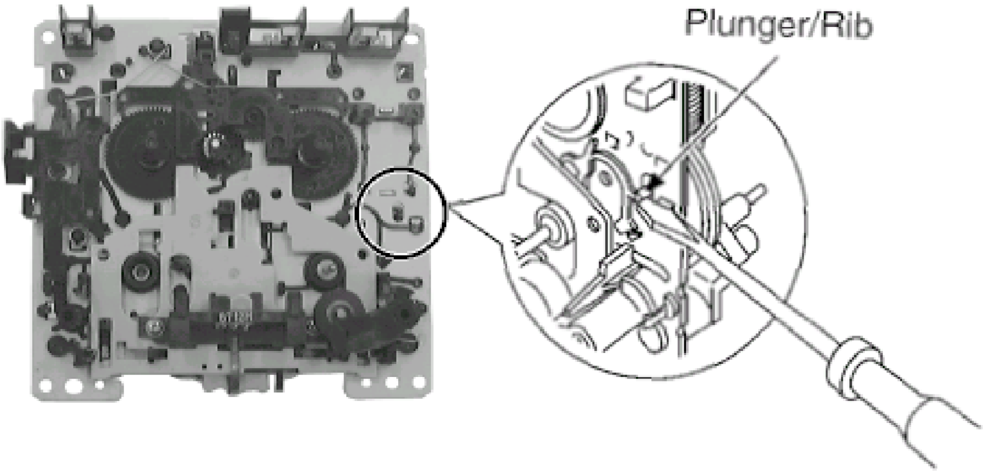
Fig. 6



12.2. Operation Check without Cassette Tape

1. Pull up the EJECT lever using a rubber band. (Cf. Fig. 6)
2. Supply DC5V to MOTOR. (→ MOTOR rotates.)
3. Lift up the mechanism unit's plunger/rib with the tip of a negative screwdriver, and operate the unit in the same timing as / supplying the power. (Cf. Fig. 7) /

Fig. 7



13. Measurement And Adjustments

13.1. Tuner/CD Sections

No adjustment required.

13.2. Cassette Deck Section

13.2.1. Requirements

- Test tape (QZZCFM) (QZZCWAT)
- Normal blank cassette tape (QZZCRA)
- Frequency indicator
- Oscilloscope
- Electrical voltmeter
- Headphone jack output jig (Cf. Fig. 8)

13.2.2. Setting of Unit

- VOLUME: MAX

13.2.3. Preparations

1. Apply [9. Assembling and Disassembling].
2. Remove 4 screws from the mechanism unit to disassemble. [9. Assembling and Disassembling].
3. Connect the headphone jack output jig (Cf. Fig. 8) to headphone jack.

Fig. 8

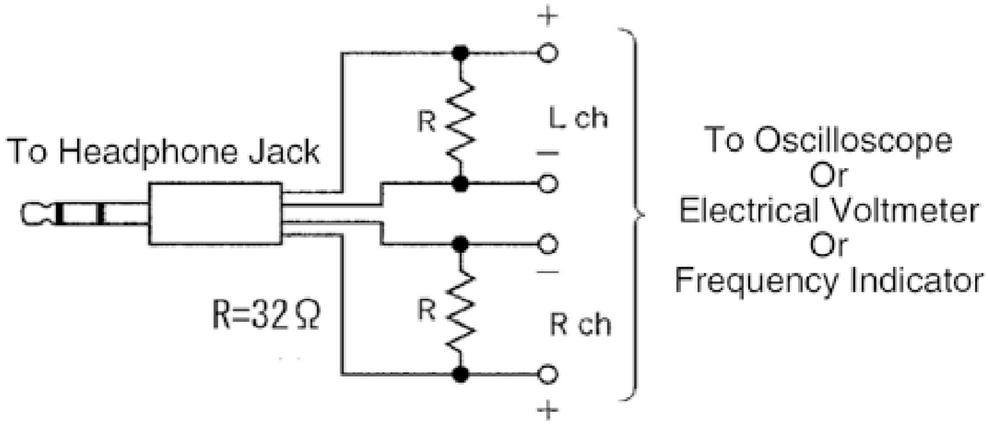
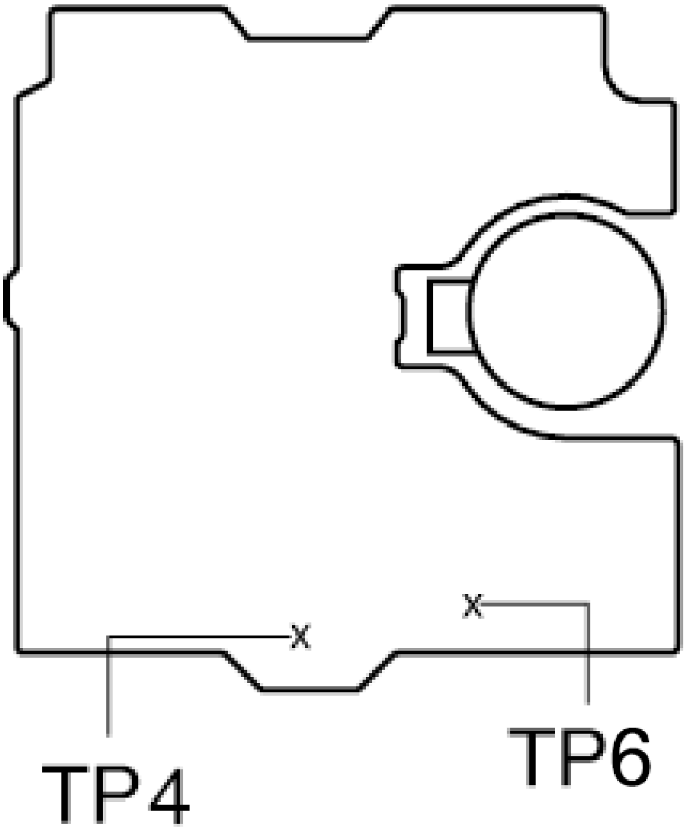

To Headphone Jack
R=32Ω
R
R
+
L ch
−
−
R ch
+
To Oscilloscope
Or
Electrical Voltmeter
Or
Frequency Indicator

Fig. 9



13.2.4. Tape Speed Adjustment

- Normal speed adjustment (only during forward playback)
(Product reference value: 3,000±90Hz)

1. Connect a frequency indicator. (Cf. Fig. 12)

2. Playback the middle portion of the test tape (QZZCWAT).

3. Adjust the motor screw so that the following output level is produced. (Cf. Fig. 10)
Adjustment Range: 3,000 ± 90Hz (a constant speed)

Fig. 10

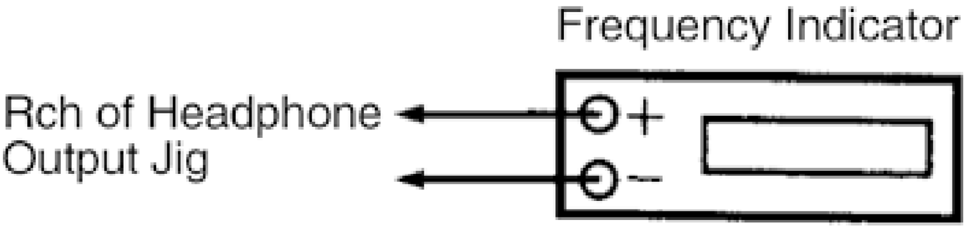
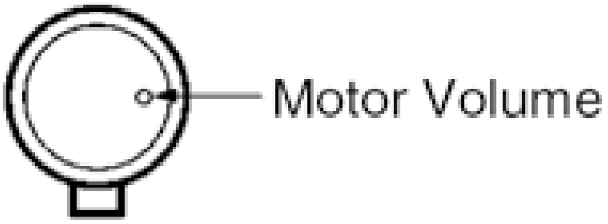

Frequency Indicator
Rch of Headphone
Output Jig
+
−

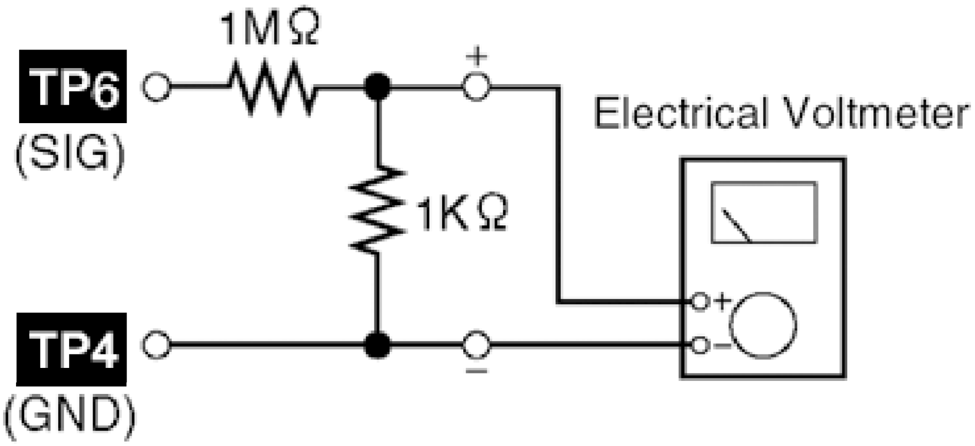
Fig. 11


Motor Volume

13.2.5. Bias Voltage Check

1. Connect an electrical voltmeter. (Cf. Fig. 9) (Cf. Fig. 12)
2. Set the function to “TAPE” position.
3. Insert a normal blank cassette tape (QZZCRA).
4. While pressing and holding down [REC (● / ❚❚)] button, press [TAPE (▶)] button to pause the recording mode. (Repeat pressing the buttons till the recording pause mode is activated.)
5. Check that the output level is within the standard range.
   Standard Range: 14 ± 4mV

Fig. 12


1MΩ
TP6
(SIG)
+
1KΩ
Electrical Voltmeter
+
−
TP4
(GND)
−

13.2.6. Bias Frequency Check

1. Connect a digital frequency counter (Figure 13).

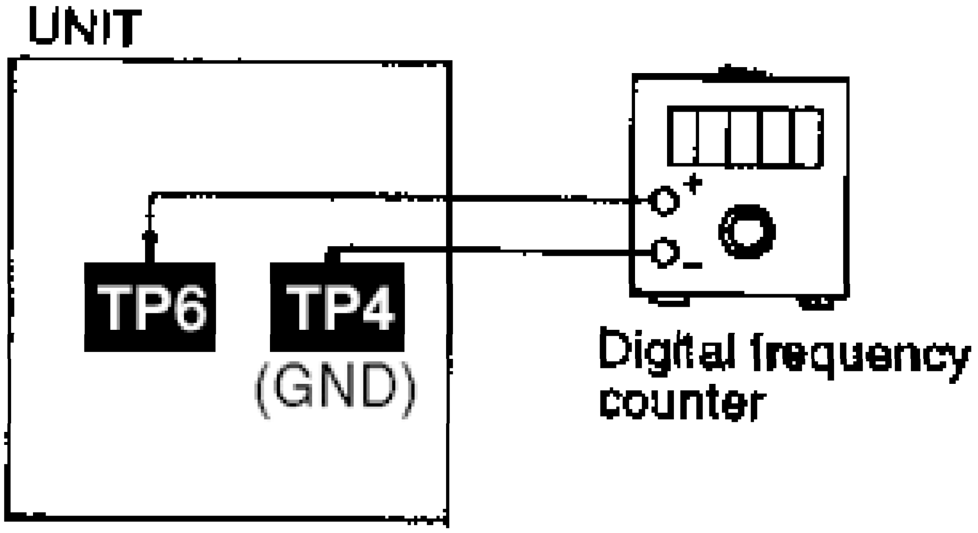
2. Set the function to “TAPE” position.

3. Insert a normal blank cassette tape (QZZCRA) and press “REC” mode on main unit.

4. Check that the output frequency is within the standard range.

Standard Value: 98 ±8 kHz

Fig. 13



14. Block Diagram

14.1. CD Servo Block

14.2. Main Block

15. Notes of Schematic Diagram

(All schematic diagrams may be modified at any time with the development of new technology)
Note :

S1
Stock switch

S2
Play switch

S3
Bottom switch

S4
Open switch

S5
Change switch

S601
CD 1 switch

S602
CD 2 switch

S603
CD 3 switch

S604
CD 4 switch

S605
CD 5 switch

S606
CD switch

S607
Tape switch

S608
Tuner/Band switch

S609
Track up switch

S610
Track Down switch

S611
Enter switch

S613
Stop/Demo switch

S614
Power switch

S615
AUX switch

S616
REV switch

S617
All Disc switch

S618
FF switch

S619
REC switch

S620
Open/Close switch

S621
CD Change switch

S623
SSEQ switch

S701
Reset switch

S971
Mode switch

S972
Half switch

S973
CR02 switch

S975
Recinh_F switch

S1901
Tape Eject switch

VR600
Volume VR

- **The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.**

No mark
: Playback

<< >>
: Rec

(( ))
: CD

< >
: FM

( )
: AM

- Importance safety notice :
Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

Caution !
IC, LSI and VLSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

- **Cover the parts boxes made of plastics with aluminium foil.**
- **Put a conductive mat on the work table.**
- **Ground the soldering iron.**
- **Do not touch the pins of IC, LSI or VLSI with fingers directly.**

CAUTION: FOR CONTINUED PROTECTION
AGAINST FIRE HAZARD,
REPLACE ONLY WITH SAME
TYPE F1, 1.6A 125V FUSE

⚠

RISK OF FIRE-REPLACE FUSE AS MARKED.

16. Schematic Diagram

16.1. CD Servo Circuit

16.2. Main Circuit

16.3. Panel Circuit, Tact Switch Circuit, Switch Circuit and Headphone Circuit

16.4. Cassette Deck Circuit, Deck Mechanism Circuit and Tape Eject

Circuit

16.5. Power Circuit

16.6. Transformer Circuit and Speaker Terminal Circuit

16.7. CD Loading Circuit

17. Printed Circuit Board

17.1. CD Servo P.C.B. (SIDE A and SIDE B)

17.2. Main P.C.B.

17.3. Panel P.C.B. and Tact Switch P.C.B.

17.4. Switch P.C.B., Headphone P.C.B. and Speaker Terminal P.C.B.

17.5. Deck P.C.B. and Tape Eject P.C.B.

17.6. Deck Mechanism P.C.B. and CD Loading P.C.B.

17.7. Power P.C.B.

17.8. Transformer P.C.B.

18. Wiring Connection Diagram

19. Illustration of IC’s, Transistors and Diodes

20. Terminal Function of IC's

20.1. IC701 (AN22004A-NF) IC HEAD AMP

Pin No.	Mark	I/O	Function
1	LPD	I	APC Amp input terminal
2	LD	O	APC Amp. output terminal
3	VCC	I	Power source terminal
4	EQSW	-	Equalizer switch terminal
5	RFOUT	O	RF summing Amp output terminal
6	RFIN	I	AGC input terminal
7	AGC	-	AGC loop filter connecting capacitor terminal
8	AGC	O	AGC output terminal
9	HPF-AMP	-	HPF Amp connecting capacitor terminal
10	3TOUT	O	3TOUT output terminal
11	HPFDET	-	Detection system's HPF connecting capacitor terminal
12	OFTCNT	-	PFTR detection level adjustment terminal
13	BDO	O	BDO output terminal
14	OFTR	O	OFTR output terminal
15	/RFDET	O	NRFDET output terminal
16	LDON	-	LDON terminal
17	GND	-	Earth terminal
18	EQBST	-	Equalizer boost adjustment terminal
19	VREF	O	VREF output terminal
20	TEN	I	Amp inverting input terminal
21	TEOUT	O	TE amp output terminal
22	FEN	I	Amp inverting input terminal
23	FEOUT	O	FE amp output terminal
24	GCTL	-	GCTL terminal
25	FBAL	I	FBAL control terminal
26	TBAL	I	TBAL control terminal
27	E	O	Tracking signal input terminal 1
28	F	O	Tracking signal input terminal 2
29	D	O	Tracking signal input terminal 4
30	B	O	Tracking signal input terminal 2

			terminal 2

Pin No.	Mark	I/O	Function
31	C	O	Tracking signal input terminal 3
32	A	O	Tracking signal input terminal 1

20.2. IC702 (MN6627934CH) IC LSI

Pin No.	Mark	I/O	Function
1	DRVDD	I	DRAM interface power supply
2	D0	I/O	DRAM data input-output 0
3	D1	I/O	DRAM data input-output 1
4	NEW	O	DRAM ROM enable signal
5	NRAS	O	DRAM RAS control signal
6	D2	I/O	DRAM data input-output 2
7	D3	I/O	DRAM data input-output 3
8	NCASO	O	DRAM CAS control 0
9	NCASI	O	DRAM CAS control 1
10	A8	O	DRAM Address 8
11	A7	O	DRAM Address 7
12	A6	O	DRAM Address 6
13	A5	O	DRAM Address 5
14	A4	O	DRAM Address 4
15	A9	O	DRAM Address 9
16	A0	O	DRAM Address 0
17	A1	O	DRAM Address 1
18	A2	O	DRAM Address 2
19	A3	O	DRAM Address 3
20	DVSS2	-	Digital GND
21	DVDD2	-	Digital power supply
22	SPOUT	O	Spindle motor drive output signal (absolute value output)
23	TRVP	O	Traverse drive output (+ output)
24	TRVM	O	Traverse drive output (- output)
25	TRP	O	Tracking drive output (+ output)
26	TRM	O	Tracking drive output (- output)

Pin No.	Mark	I/O	Function
27	FOP	O	Focus drive output (+ output)
28	FOM	O	Focus drive output (- output)
29	IOVDD1	-	IO power supply
30	TBAL	O	Tracking balance adjustment output
31	FBAL	O	Focus balance adjustment output
32	FE	I	Focus error signal input (analog input)
33	TE	I	Tracking error signal input (analog input)
34	RFENV	I	RF envelope signal input (analog input)
35	OFT	I	Off track signal input (H: off track)
36	NRFDET	I	RF detective signal input (L: detection)
37	BDO	I	Drop out signal input (H: drop out)
38	LDON	O	Laser ON signal input (H: ON)
39	ARF	I	RF signal input
40	IREF	I/O	Resistance terminal for current electricity setting
41	ADPVCC	I	Analog power supply voltage monitor input
42	DSLF	I/O	DSL loop filter terminal
43	RFSW	I/O	DSL loop filter terminal
44	PLLF	I/O	PLL loop filter terminal (phase comparison)
45	PLLFO	I/O	PLL loop filter terminal (speed comparison)
46	AVDD2	-	”Analog power supply
47	AVSS2	-	”Analog ground
48	OUTL	O	L ch audio output
49	AVSS1	-	Analog ground (audio output)
50	OUTR	O	R ch audio output
51	AVDD1	-	Analog power supply (audio output)
52	DVSS3	-	Digital GND
53	DVDD3	-	Digital power supply

Pin No.	Mark	I/O	Function
54	IOVDD2	-	IO power supply
55	FLAG	O	Flag output
56	EXT2	I/O	Extension input-output port 2
57	EXT0	I/O	Extension input-output port 0
58	EXT1	I/O	Extension input-output port 1
59	REGON	I	”In-housed regulator control (H: ON
60	TX	O	Digital audio interface output
61	MCLK	I	Micon command clock input
62	MDATA	I	Micon command data input
63	MLD	I	Micon command load input (L: Load)
64	BLKCK	O	Sub code block clock (f-75Hz: normal play)
65	PWMSEL	I	”PWM output mode switch input (L: direct
66	SMCK	O	4.2336MHz/8.4672MHz clock output
67	SBCK	I/O	Sub code serial output clock input
68	STAT	O	Status output
69	NRST	I	Reset input (L: reset)
70	SPPOL	O	Spindle motor drive output signal (polarity output)
71	PMCK	O	88.2kHz clock output
72	DQSY	O	CD TEXT data back output
73	TXTD	O	CD TEXT data output
74	TXTCK	I/O	CD TEXT resister outer clock input
75	NTEST	I	Test input (H: normal)
76	X2	O	Oscillator output
77	X1	I	Oscillator input
78	DVSS1	-	Digital GND
79	DVDD1	I	Digital power supply
80	MON	I/O	Monitor terminal

20.3. IC703 (BA5948FPE2) IC 4CH DRIVE

Pin No.	Mark	I/O	Function
1	IN2	I	Motor Driver 92 Input
2	PC2	I	Turntable Motor Drive Signal ("L":ON)
3	IN1	I	Motor Driver (1) Input
4	PC1	-	Traverse Motor Drive Signal ("L":ON)
5	N.C.	-	No Connection
6	N.C.	-	No Connection
7	N.C.	-	No Connection
8	N.C.	-	No Connection
9	PGND1	-	Ground Connection (1) for Driver
10	PVCC1	I	Power Supply (1) for Driver
11	D1-	O	Motor Driver (1) reverse - action output
12	D1+	O	Motor Driver (1) forward - action output
13	D2-	O	Motor Driver (2) reverse - action output
14	D2+	O	Motor Driver (1) forward - action output
15	D3-	O	Motor Driver (3) reverse - action output
16	D3-	O	Motor Driver (3) forward - action output
17	D4-	O	Motor Driver (4) reverse - action output
18	D4+	O	Motor Driver (4) forward - action output
19	PVCC2	-	Power Supply (2) for Driver
20	PGND2	-	Ground Connection (2) for Driver
21	N.C.	-	No Connection
22	N.C.	-	No Connection
23	N.C.	-	No Connection
24	N.C.	-	No Connection

Pin No.	Mark	I/O	Function
25	VCC	I	Power Supply Terminal
26	VREF	I	Reference Voltage Input
27	IN4	I	Motor Driver (4) Input
27	IN3	I	Motor Driver (3) Input

20.4. IC302 (C2CBJF000016) MICRO PROCESSOR

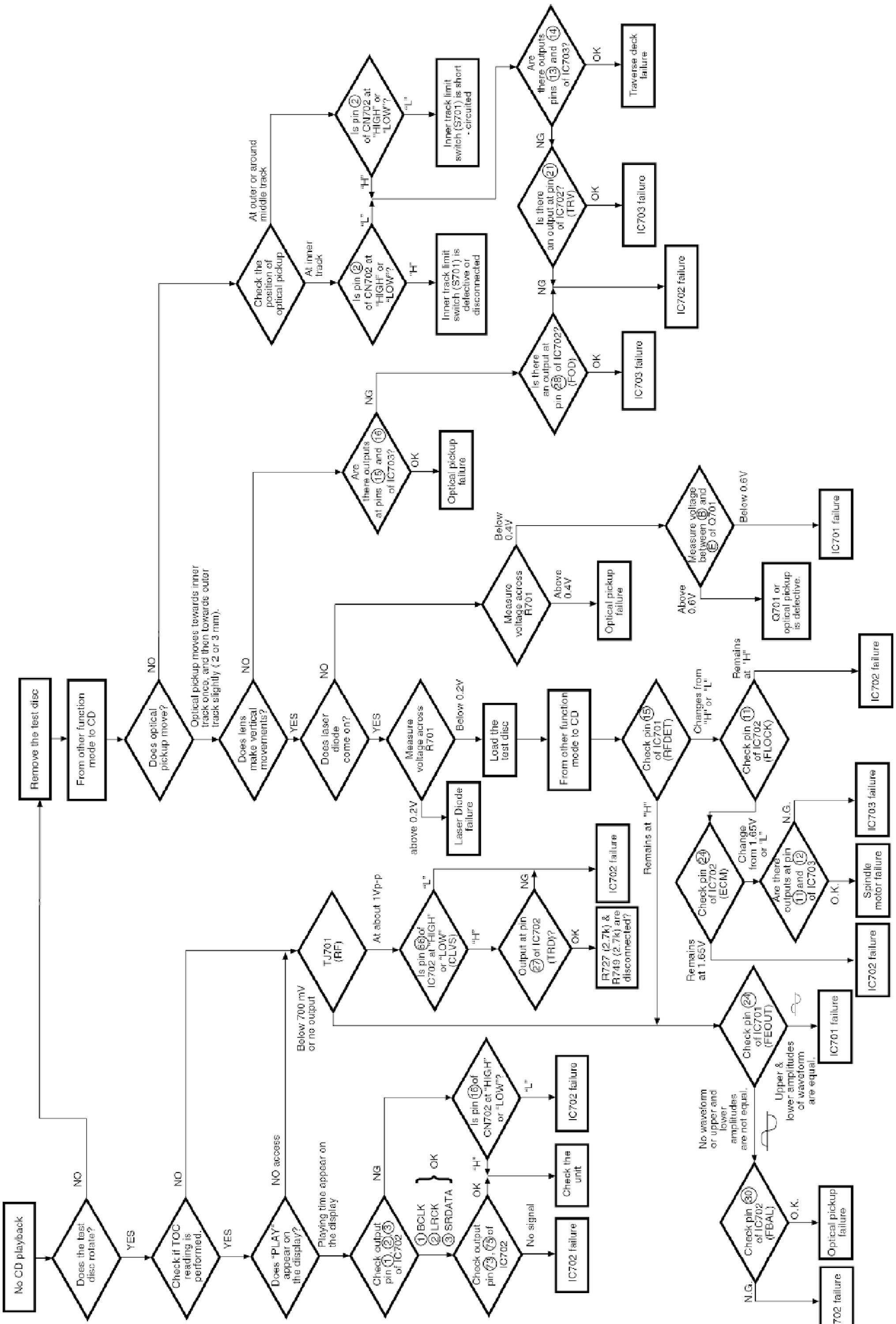
Pin No.	Mark	I/O	Function
1	CH_SW	I	Change Switch (CR16)
2	TU_TUNED	I	Tuner tuned signal
3	TU_ST	I	Tuner Stereo signal
4	TU_CK	I	Tuner Serial Clock Input
5	TU_SDA	I	Tuner Serial Data Input
6	MBP1	O	Microcomputer Beat Proof Output 1 (CONTROL)
7	MBP2	O	Microcomputer Beat Proof Output 2 (CONTROL)
8	BYTE	-	External Data Bus Width Select Input (Connect To Ground)
9	CNVSS	-	Flash Mode Terminal (Connect To Ground)
10	XCIN	-	32.768 kHz Sub Clock
11	XCOUT	-	32.768 kHz Sub Clock
12	/RESET	-	Reset Input (ACTIVEL)
13	XOUT	-	10 MHz Main Clock
14	VSS	-	Ground (0V)
15	XIN	-	10 MHz Main Clock
16	VCC	-	Power Sipply (+5V)
17	/NMI	-	Connect to Vcc (+5V)
18	RMT	I	Remote Control Input
19	BLKCK	I	CD Block Clock Input (Inverted)
20	SYNC	I	AC Failure Detect Input
21	MUTE_H	O	HIC Mute
22	EE_CS/	O	EEPROM Chip Select
23	EE_CLK	O	EEPROM CLOCK
24	MUTE_T	O	H=Tuner muting
25	MUTE_X	O	A=AUX muting

Pin No.	Mark	I/O	Function
26	FL_CS1	O	FL Driver Chip Select (Master)
27	FL_CS2	O	FL Driver Chip Select (PM 29 ONLY)
28	FL_CLK	O	Serial Clock to FL Driver
29	/FL_RESET	O	Reset Input (ACTIVEL)
30	FL_DOUT	O	Sarial Data To FL Driver (Output)
31	RXD	O	
32	TXD	O	
33	SCLK	O	
34	BUSY	O	
35	MEM_SI	O	Flash Memory Serial Input
36	MEM_SO	I	Flash Memory Serial Output
37	MEM_CK	O	Flash Memory Serial Clock
38	MEM_CS	O	Flash Memory Chip Select
39	MCLK	O	CD Command CLK Output
40	MUTE_A	O	Audio Mute
41	EPM	-	-
42	MDATA	O	CD Command Data Output
43	MLD	O	CD Command Load Output/
44	RDS_CLK	I	RDS Clock Input
45	RDS_DAT	I	RDS Data Input
46	CE	O	-
47	DCDET	I	DC Detect Input
48	STATUS	I	CD Servo LSI Status Input (Inverted)
49	PCONT	O	Main Transformer Control Output
50	PLAY_SW	I	Play Switch (CR16)
51	ST_SW	I	Stock Switch (CR16)
52	OP_SW	I	Open Switch (CR16)
53	POS	I	Position Switch (CR16)
54	BT_SW	I	Bottom Switch (CR16)
55	M1_R	O	Changer Motor 1 Reverse Control

Pin No.	Mark	I/O	Function
56	M1_F	O	Changer Motor 1 Forward Control
57	M2_R	O	Changer Motor 2 Reverse Control
58	M2_F	O	Changer Motor 2 Forward Control
59	REC	O	when record circuit is operating DURING RECORDING=H
60	KEY_LED	O	Dimmer ON=L, Dimmer Off=H-
61	PHOTO	I	PHOTO (SG Mechanism only)
62	VCC	-	Power Supply (+5V)
63	EE_DAT	I/O	EE_DAT
64	VSS	-	Ground (0V)
65	DMT	O	Deck Mute at mecha transition L=mute OFF, H=mute ON
66	BP1	O	AM beatproof 1 output L =BP1, H=BP2
67	ASP_CLK	O	ASP CLK
68	ASP_DAT	O	ASP DATA
69	N.C.	-	No Connection
70	N.C.	-	No Connection
71	N.C.	-	No Connection
72	N.C.	-	No Connection
73	N.C.	-	No Connection
74	N.C.	-	No Connection
75	MEM_RST	O	Flash memory reset
76	MEM_WP	O	Flash Memory Write Protect
77	JOG1	I	JOG SEARCH 1
78	JOG2	I	JOG SEARCH 2
79	/CD	O	CD POWER CONTROL (Active Low)
80	CD_RST	O	CD Reset Output
81	N.C.	-	No Connection
82	/RESTSW	I	CD Limit Switch Input for the Most Inner Point (Active Low)
83	N.C.	-	No Connection
84	N.C.	-	No Connection

Pin No.	Mark	I/O	Function
85	SSEQ_LED	O	Super Sound EQ LED Control
86	RE_LED	O	MP3/WMA Re-master Control
87	MOTOR	O	MOTOR Control Output L=OFF, H=ON
88	PLUNGER	O	Deck PLUNGER Control Output L=OFF, H=ON
89	DECK_AD1	I	DECK AD Input 1
90	DECK_AD2	I	DECK AD Input 2
91	REG1	I	Region Setting 1
92	KEY3	I	KEY3 INPUT
93	KEY2	I	KEY2 INPUT
94	KEY1	I	KEY1 INPUT
95	VOL_JOG1	I	Volume Jog 1
96	AVSS	-	Analog Power Supply Input (Connect to GND)
97	N.C.	-	No Connection
98	VREF	-	Reference for A-D (5V)
99	AVCC	-	Analog Power Supply Input
100	N.C.	-	No Connection

21. Troubleshooting Guide


No CD playback
Does the test disc rotate?
YES
NO
Remove the test disc
From other function mode to CD
Does optical pickup move?
NO
Optical pickup moves towards inner track once, and then towards outer track slightly (2 or 3 mm).
Does lens make vertical movements?
YES
NO
Does laser diode come on?
YES
NO
Measure voltage across R701
Below 0.2V
above 0.2V
Laser Diode failure
Load the test disc
From other function mode to CD
Check pin ⑮ of IC701 (RFDET)
Changes from "H" or "L"
Remains at "H"
Check pin ⑪ of IC702 (FLOCK)
Remains at "H"
IC702 failure
Check pin ㉔ of IC702 (ECM)
Change from 1.65V or "L"
Remains at 1.65V
Are there outputs at pin ⑪ and ⑫ of IC703
N.G.
O.K.
IC703 failure
Spindle motor failure
IC702 failure
Check pin ㉔ of IC701 (FEOUT)
IC701 failure
No waveform or upper and lower amplitudes are not equal.
Upper & lower amplitudes of waveform are equal.
Check pin ㉚ of IC702 (FBAL)
O.K.
N.G.
Optical pickup failure
IC702 failure
Measure voltage across R701
Above 0.4V
Below 0.4V
Optical pickup failure
Measure voltage between Ⓑ and Ⓔ of Q701
Above 0.6V
Below 0.6V
Q701 or optical pickup is defective.
IC701 failure
Are there outputs at pins ⑮ and ⑯ of IC703?
OK
NG
Optical pickup failure
Is there an output at pin ㉘ of IC702? (FOD)
OK
NG
IC703 failure
IC702 failure
Is there an output at pin ㉑ of IC702? (TRV)
OK
NG
IC703 failure
Are there outputs pins ⑬ and ⑭ of IC703?
OK
Traverse deck failure
Check the position of optical pickup
At inner track
At outer or around middle track
Is pin ② of CN702 at "HIGH" or "LOW"?
"H"
"L"
Inner track limit switch (S701) is defective or disconnected
Is pin ② of CN702 at "HIGH" or "LOW"?
"L"
"H"
Inner track limit switch (S701) is short - circuited
Check if TOC reading is performed.
YES
NO
Does "PLAY" appear on the display?
Playing time appear on the display
NO access
Below 700 mV or no output
TJ701 (RF)
At about 1Vp-p
Is pin ㊿ of IC702 at "HIGH" or "LOW" (CLVS)
"L"
"H"
IC702 failure
Output at pin ㉗ of IC702 (TRD)?
NG
OK
R727 (2.7k) & R749 (2.7k) are disconnected?
Check output pin ①, ②, ③ of IC702
①BCLK
②LRCK
③SRDATA
OK
NG
Check output pin ㊸, ㊺ of IC702
OK
No signal
IC702 failure
Is pin ⑯ of CN702 at "HIGH" or "LOW"?
"H"
"L"
IC702 failure
Check the unit

22. Parts Location and Replacement Parts List

Notes:

- Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.

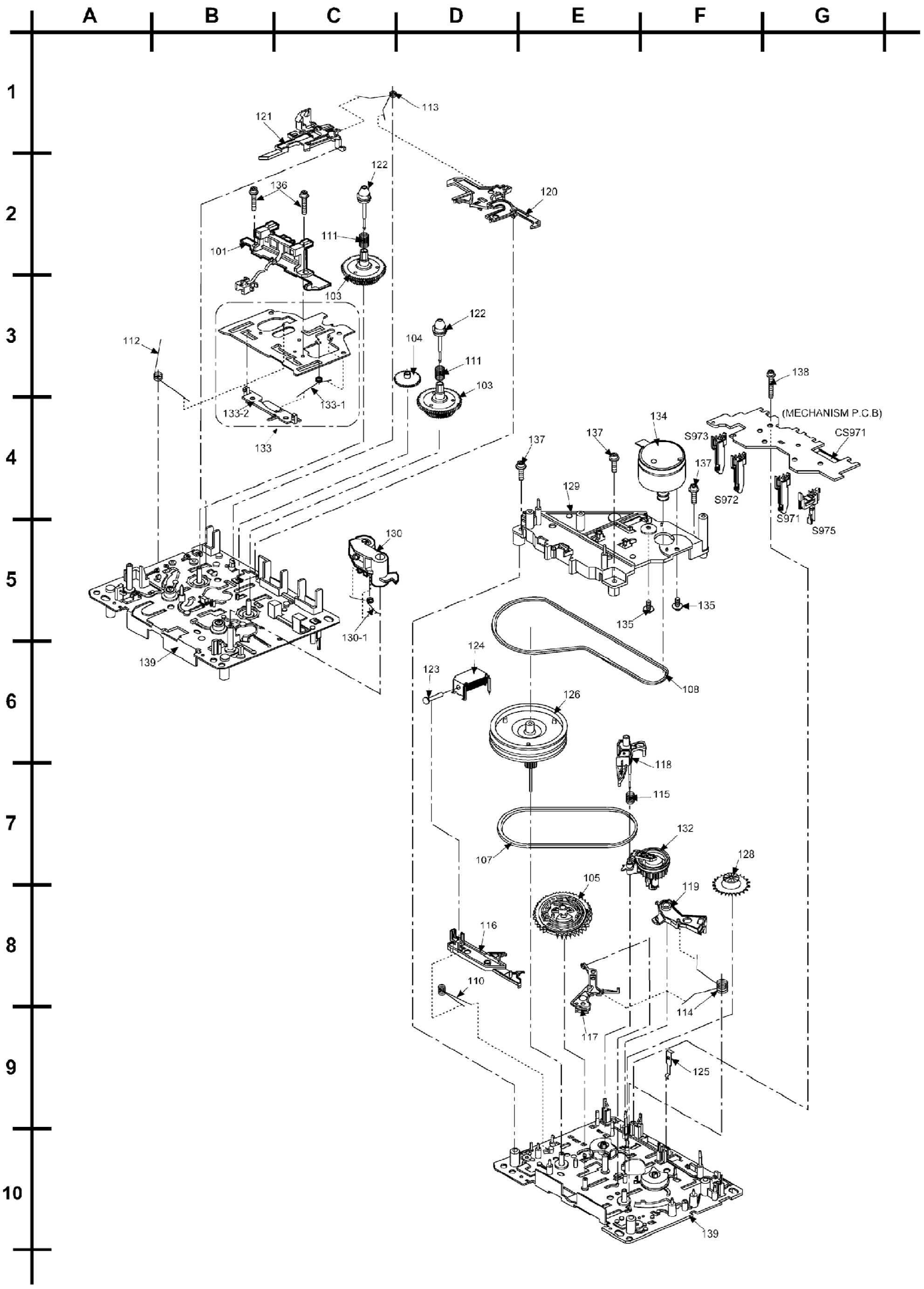
When replacing any of these components, be sure to use only manufacturer’s specified parts shown in the parts list.

- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)
  Parts without these indications can be used for all areas.
- Warning: This product uses a laser diode. Refer to caution statements on page 6.
- Capacitor values are in microfarads (μ F) unless specified otherwise, P= Pico-farads (pF), F= Farads.
- Resistance values are in ohms, unless specified otherwise, 1K= 1,000 (OHM).
- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- [M] Indicates in the Remarks columns indicates parts supplied by PAVCSG.
- The “(SF)” mark denotes the standard part.
- Reference for O/I book languages are as follows:

Ar:	Arabic	Du:	Dutch	It:	Italian	Sp:	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	Sw:	Swedish
Cz:	Czech	Fr:	French	Po:	Polish	Co:	Traditio Chinese
Da:	Danish	Ge:	German	Ru:	Russian	Cn:	Simplifi Chinese
Pe:	Persian						

22.1. Deck Mechanism

22.1.1. Deck Mechanism Parts Location (RAA4402-S)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(MECHANISM P.C.B)
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CS971
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S971
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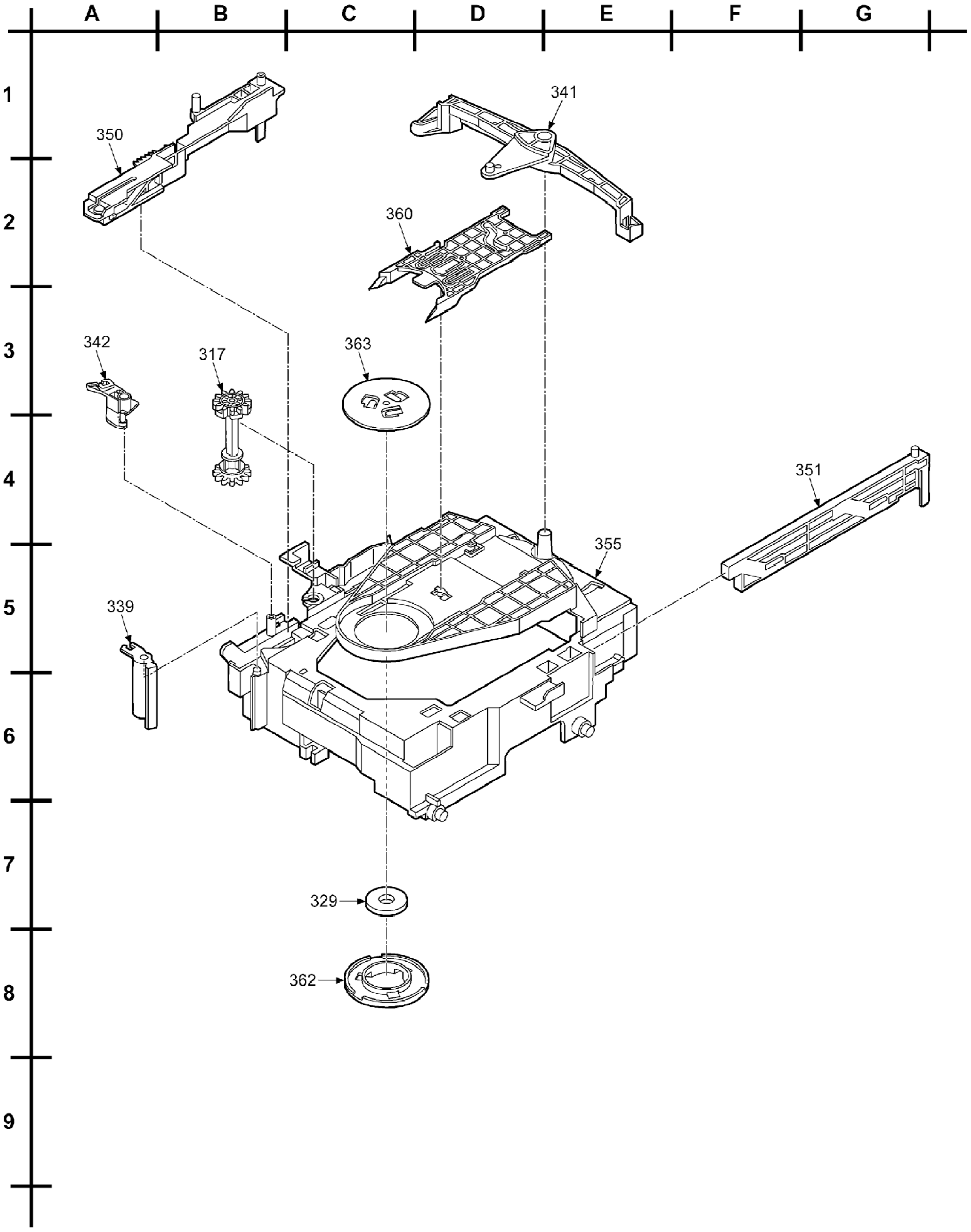
22.1.2. Deck Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CASSETTE DECK	
101	RED0067	R/P HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026	MAIN GEAR	[M]
107	RDV0033-4	WINDING BELT	[M]
108	RDV0064	CAPSTAN BELT	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAB PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406	FR LEVER SPRING	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372	WINDING LEVER	[M]
119	RML0374	EJECT LEVER	[M]
120	RMM0131	BRAKE ROD	[M]
121	RMM0133	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RXQ0470	PLUNGER	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0061	FLYWHEEL F ASSY	[M]
128	RXG0040	FF RELAY GEAR ASSY	[M]
129	RMK0283A-J	SUB-CHASSIS	[M]
130	RXL0124	PINCH ROLLER F ASSY	[M]
130-1	RMB0401	PINCH ARM SPRING F	[M]
132	RXL0126	WINDING ARM ASSY	[M]
133	RXQ0412	HEAD PANEL ASSY	[M]
133-1	RMB0405	FR ROD SPRING	[M]
133-2	RMM0132	FR ROD	[M]
134	REM0098	CAP MOTOR ASSY	[M]
135	RHD26022	MOTOR SCREW	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCREW	[M]
137	XTW26+10S	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17	PCB EARTH SCREW	[M]
139	RFKJSTR280PP	CHASSIS ASS’Y	[M]

22.2. CD Loading Mechanism

22.2.1. CD Loading Mechanism Parts Location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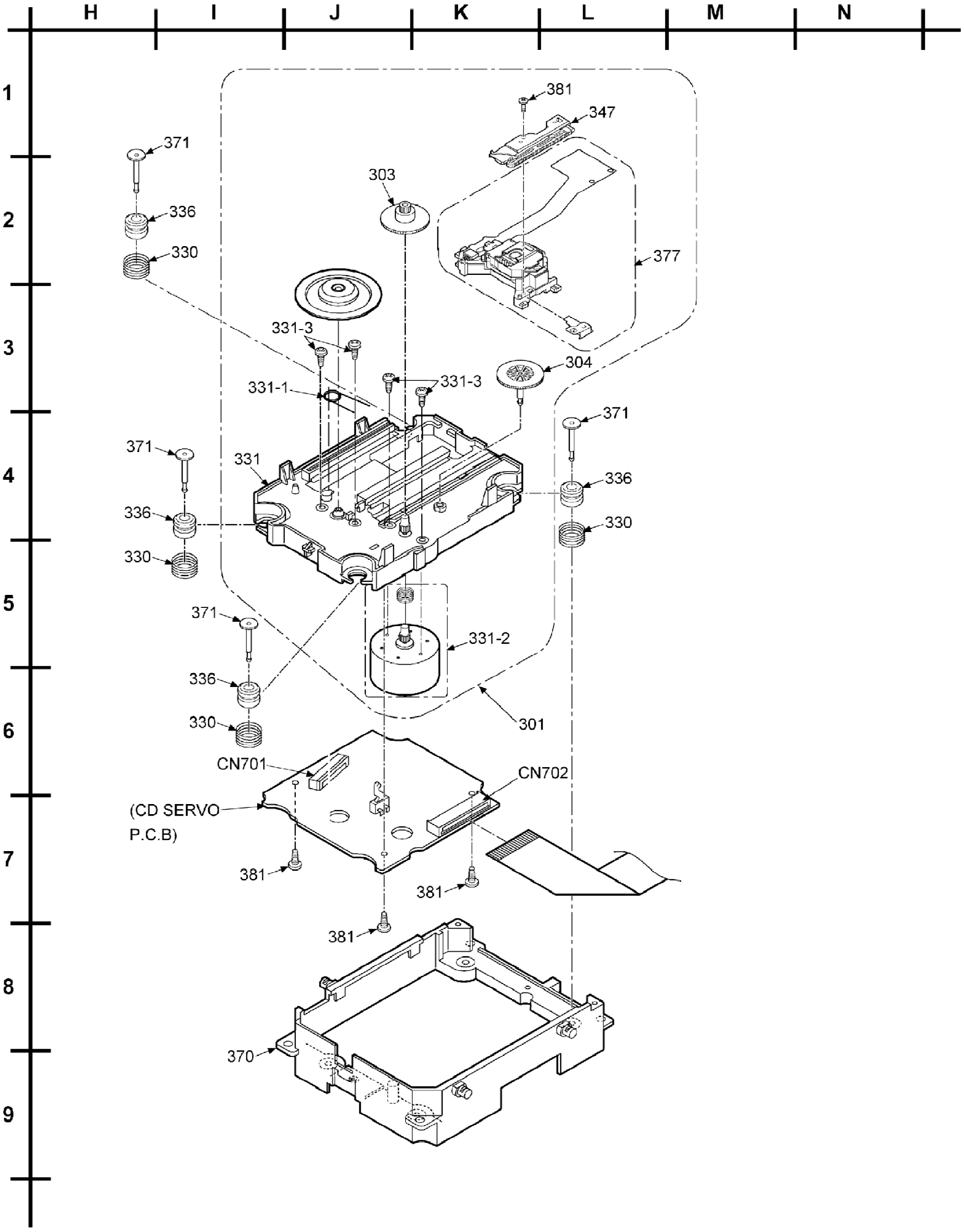
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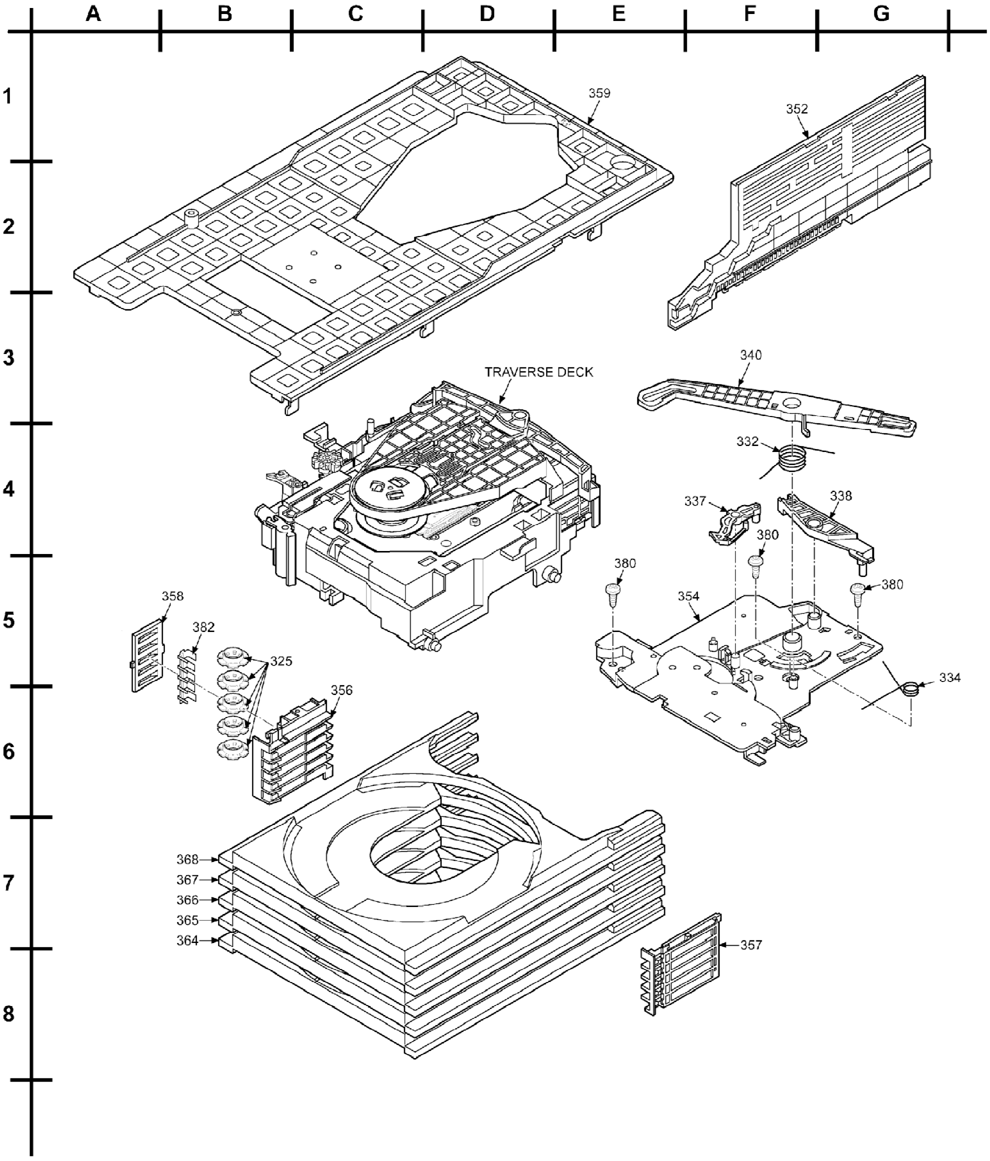
CN701
CN702
(CD SERVO
P.C.B)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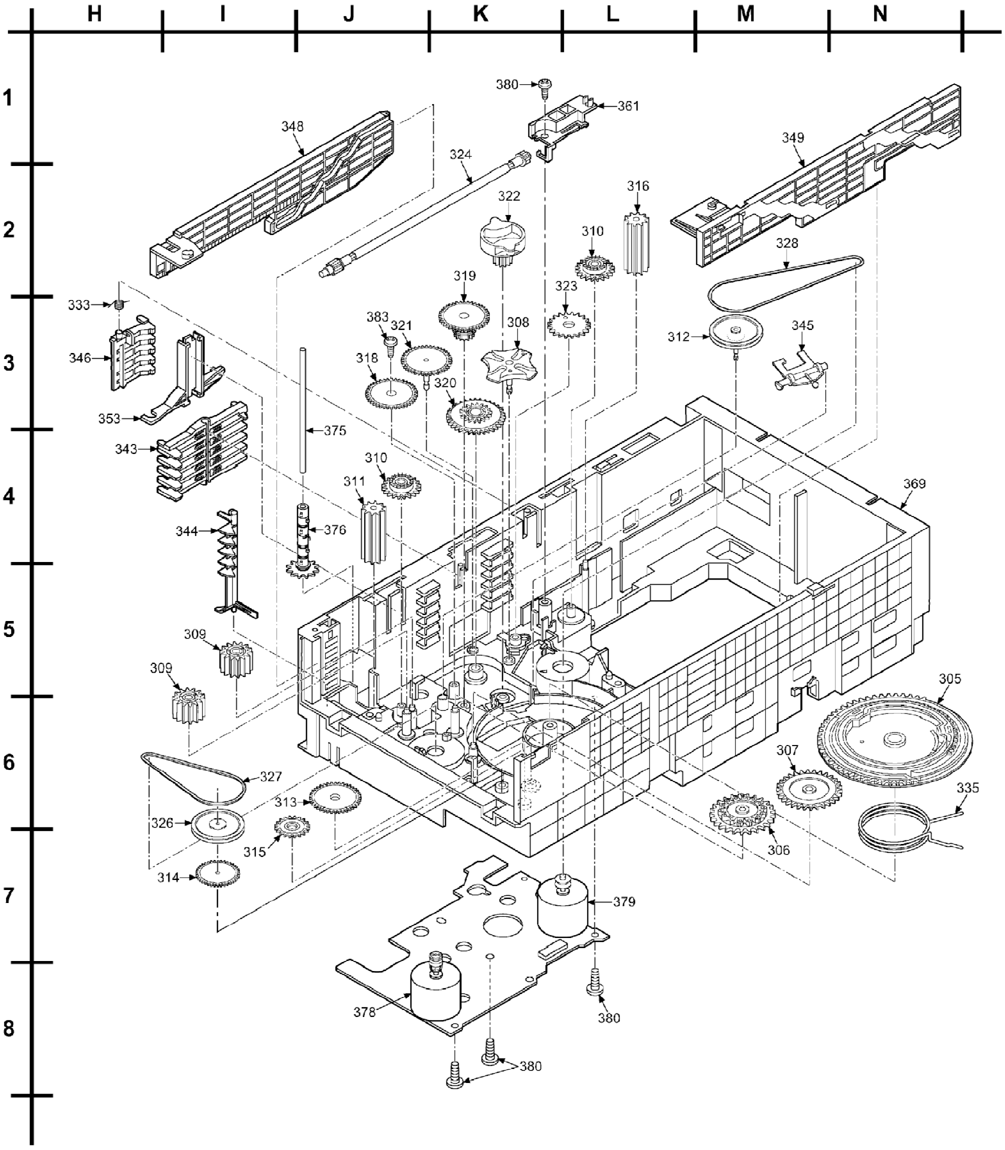
TRAVERSE DECK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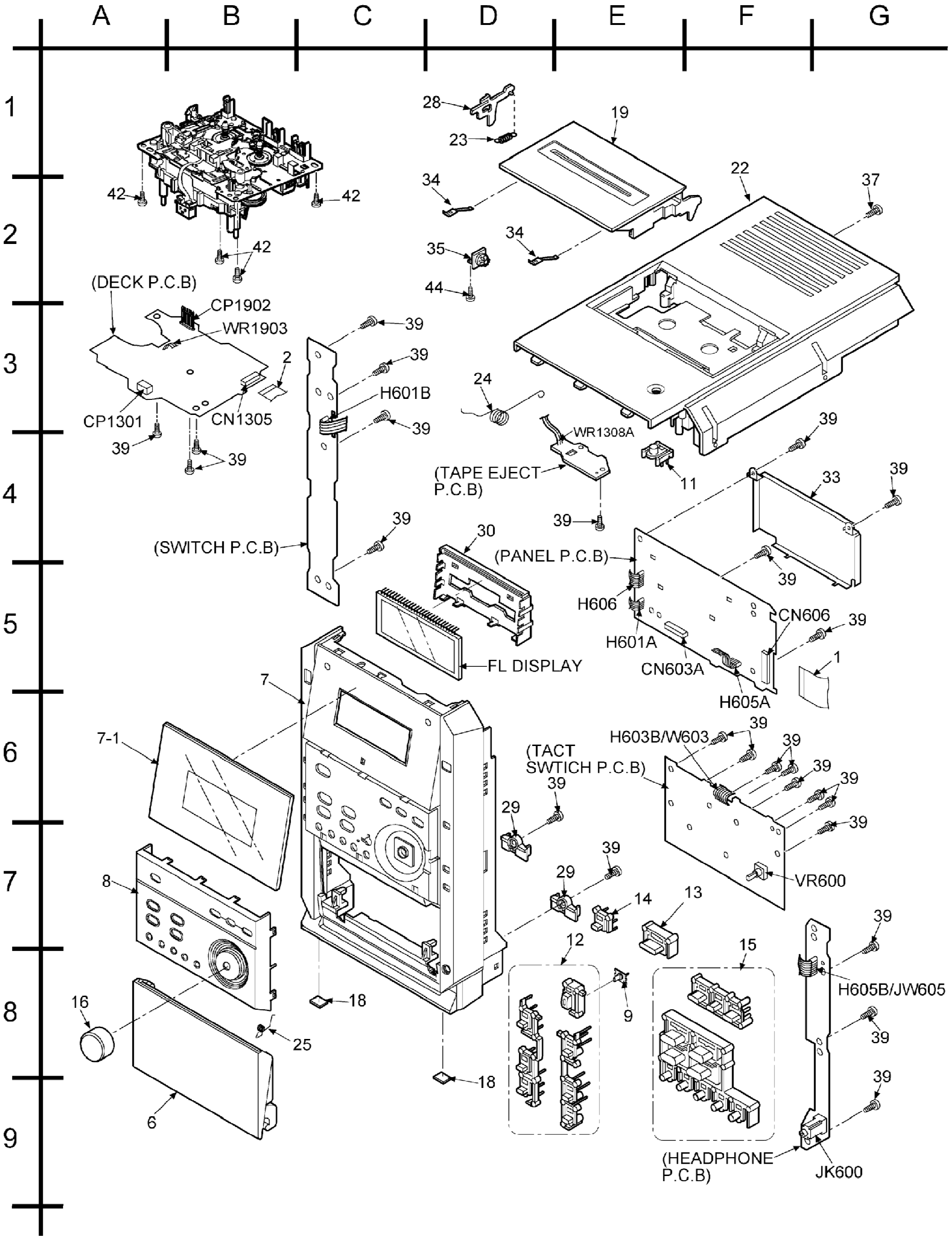
22.2.2. CD Loading Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	RAE0157A-V	TRAVERSE UNIT	[M]
303	RDG0455	TRV GEAR (A)	[M]
304	RDG0456	TRV GEAR (B)	[M]
305	RDG0519-1	MAIN GEAR	[M]
306	RDG0520	SPEED UP GEAR	[M]
307	RDG0521	REVERSE GEAR	[M]
308	RDG0522	GENEVA GEAR	[M]
309	RDG0523	HOR RELAY GEAR	[M]
310	RDG0525	CROWN GEAR	[M]
311	RDG0526	TRAY RELAY GEAR	[M]
312	RDG0527	UD PULLEY GEAR	[M]
313	RDG0528	HOR SPEED DOWN GEAR	[M]
314	RDG0529	HOR SPEED DOWN GEAR	[M]
315	RDG0530	HOR DRIVE GEAR	[M]
316	RDG0531-1	LOAD RELAY GEAR	[M]
317	RDG0532	LOAD GEAR	[M]
318	RDG0534	UD SPEED DOWN GEAR	[M]
319	RDG0535	UD SPEED DOWN GEAR	[M]
320	RDG0536	SELECT SPEED DOWN GEAR	[M]
321	RDG0537-1	SELECT DRIVE GEAR	[M]
322	RDG0538-1	CHANGE GEAR	[M]
323	RDG0539	UD DRIVE GEAR	[M]
324	RDG0540	TIMING GEAR	[M]
325	RDG0542	TRAY GEAR	[M]
326	RDG0543	HOR PULLEY GEAR	[M]
327	RDV0068	HOR BELT	[M]
328	RDV0069	UD BELT	[M]
329	RHM0001	MAGNET	[M]
330	RME0109	FLOATING SPRING	[M]
331	RFKNCT101	TRAVERSE UNIT ASS’Y	[M]
331-1	RME0369	PRESS SPRING	[M]
331-2	RXQ0632	TRAVERSE MOTOR UNIT	[M]
331-3	XQN17+C28F	SCREW	[M]
332	RME0344-1	UD ASSIST SPRING	[M]
333	RME0361	TRAY STOPPER SPRING	[M]
334	RME0363-1	LIMIT SPRING	[M]
335	RME0368-1	MAIN GEAR SPRING	[M]
336	RMG0563-T	FLOATING RUBBER	[M]
337	RML0616	SPEED UP LOCK	[M]
338	RML0617-2	SEPARATE LEVER 1	[M]
339	RML0618-1	SEPARATE LEVER 2	[M]
340	RML0619-1	UD. CONNECTION LEVER	[M]
341	RML0620	TRV. CONNECT LEVER	[M]
342	RML0621-2	TRAY CHANGE LEVER	[M]
343	RML0622-1	TRAY LOCK LEVER	[M]
344	RML0623	OPEN SW. LEVER	[M]
345	RML0624	CHANGE LEVER	[M]
346	RML0637	TRAY STOPPER	[M]
347	RMM0218	TRAVERSE DRIVE RACK	[M]
348	RMM0239-1	UD RACK (L)	[M]
349	RMM0240	UD.RACK (R)	[M]
350	RMM0241-1	TRV SLIDE PLATE (L)	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
351	RMM0242-1	TRV SLIDE PLATE (R)	[M]
352	RMM0243-2	SELECT RACK PART	[M]
353	RMM0244	SELECT GUIDE	[M]
354	RMQ1051-2	PITCH PLATE PART	[M]
355	RMQ1052-1	UD BASE	[M]
356	RMQ1056	TRAY GUIDE [L]	[M]
357	RMQ1057	TRAY GUIDE [R]	[M]
358	RMQ1058	GEAR HOLDER	[M]
359	RMQ1059-2	TOP COVER	[M]
360	RMQ1060	CLAMP GUIDE	[M]
361	RMQ1061	TG.PLATE	[M]
362	RMR0334	FIXTURE	[M]
363	RMR0624-W5	CLAMPER	[M]
364	RMR1407A-H1	TRAY	[M]
365	RMR1407B-H1	TRAY	[M]
366	RMR1407C-H1	TRAY	[M]
367	RMR1407D-H1	TRAY	[M]
368	RMR1407E-H1	TRAY	[M]
369	RFKNAPM77MDS	MECHA BASE ASS’Y	[M]
370	RMR1427-X	MIDDLE CHASSIS	[M]
371	RMS0757-1	FIXED PIN	[M]
375	RMS0762	TRAY GEAR SHAFT	[M]
376	RXG0053	TRAY DRIVE GEAR ASSY	[M]
377	RXQ0999	OPU UNIT	[M]
378	RXQ0803	LOADING MOTOR ASS’Y	[M]
379	RXQ0804	UD MOTOR ASS’Y	[M]
380	XTB3+10J	SCREW	[M]
381	XTN2+6G	SCREW	[M]
382	RMC0472	TRAY SPRING	[M]
383	XTBS26+8J	SCREW	[M]

22.3. Cabinet

22.3.1. Cabinet Parts Location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CP1902
WR1903
H601B
CP1301
CN1305
WR1308A
(TAPE EJECT
P.C.B)
(SWITCH P.C.B)
(PANEL P.C.B)
H606
CN606
H601A
FL DISPLAY
CN603A
H605A
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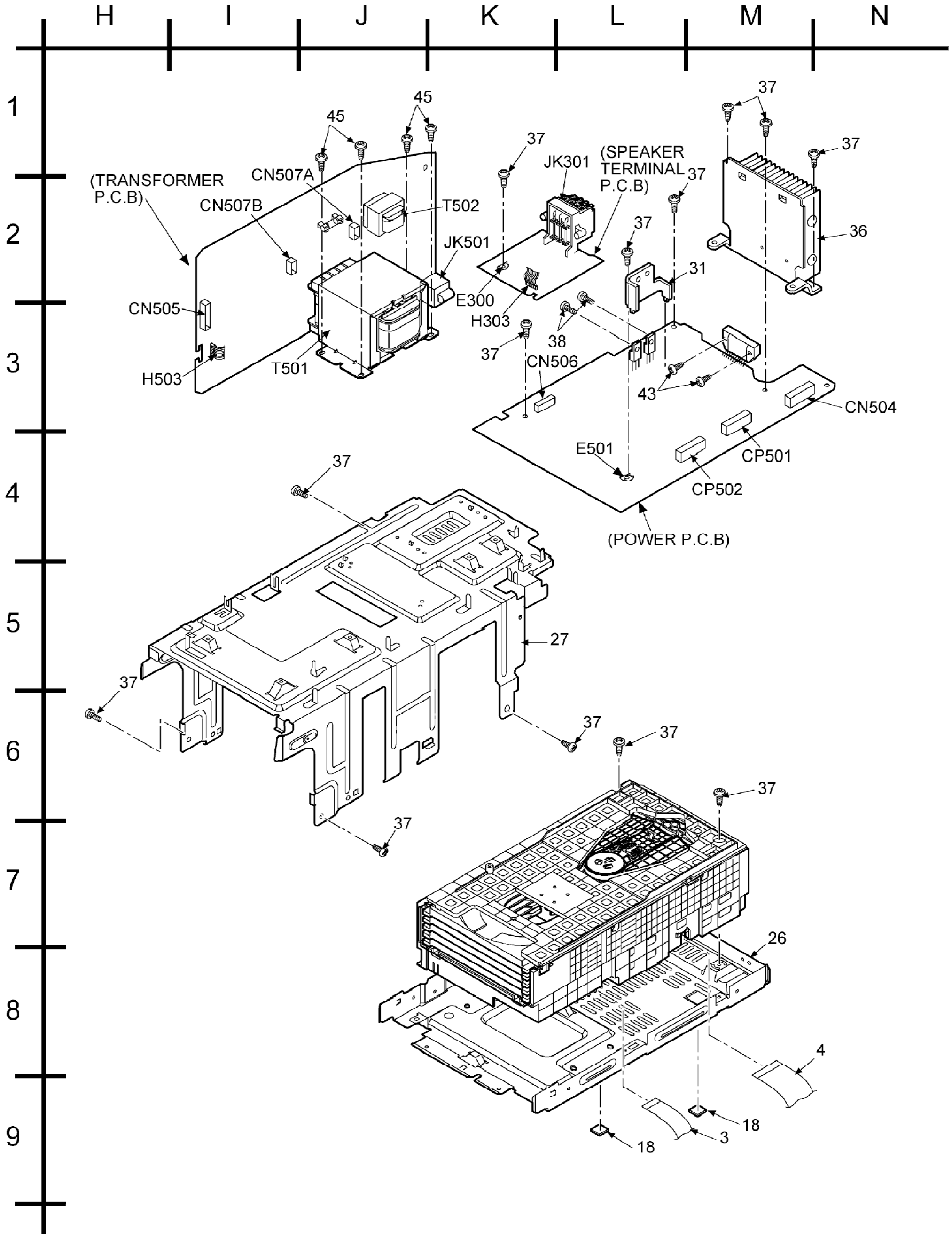
H603B/W603
(TACT
SWTICH P.C.B)
VR600
H605B/JW605
(HEADPHONE
P.C.B)
JK600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(TRANSFORMER P.C.B)
CN507A
CN507B
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JK501
JK301
(SPEAKER TERMINAL P.C.B)
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H303
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CN506
CN505
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CP501
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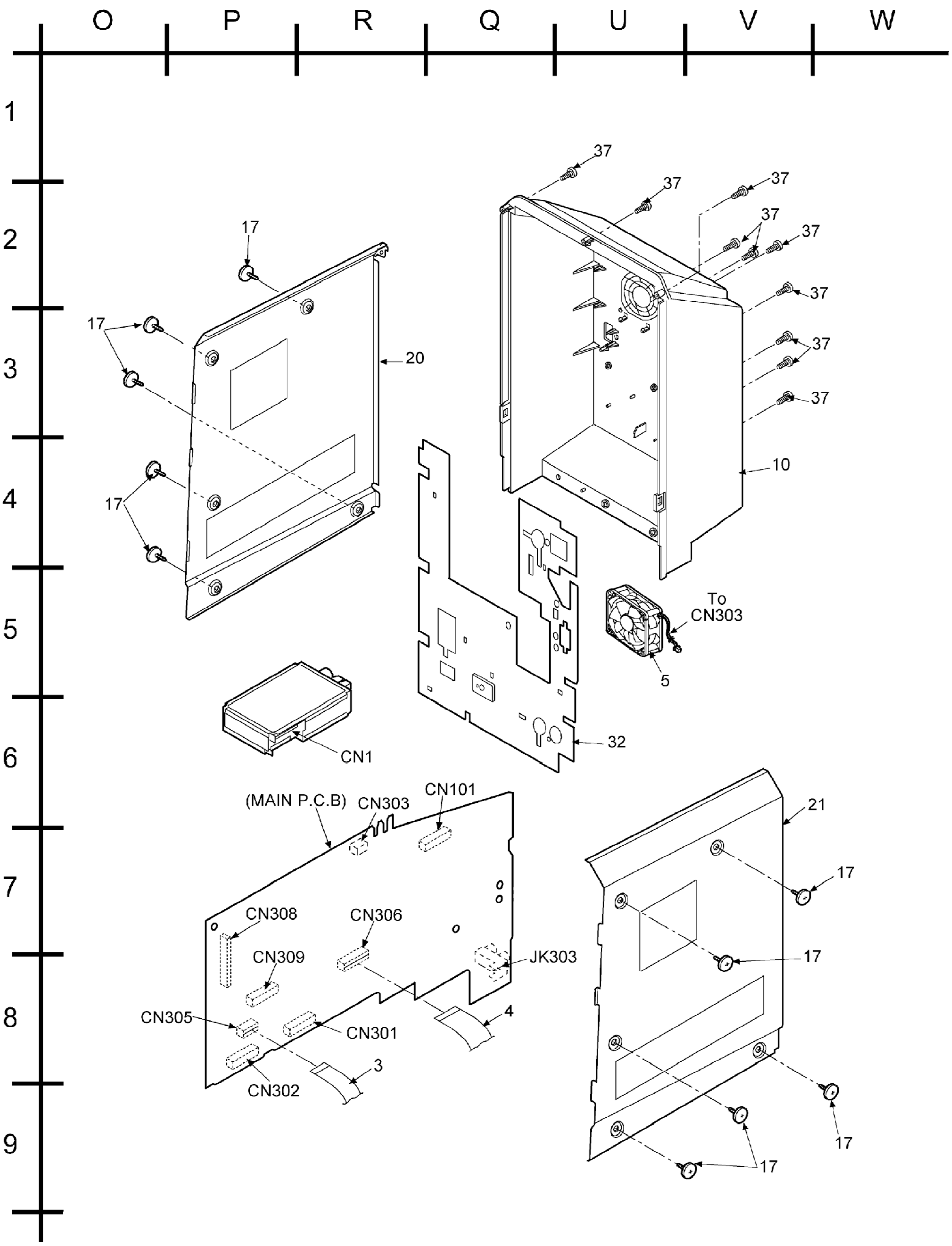
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CN303
CN101
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CN308
CN306
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CN305
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22.3.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	REEV0025	24FFC (PANEL-MAIN)	[M]
2	REEV0026	21P FFC (DECK PCB)	[M]
3	REEX0166	14P FFC WIRE	[M]
4	REEV0039	17P FFC (CR16-MAIN)	[M]
5	REM0094A	COOLING FAN	[M]
6	RFKLAPM19PCS	CD LID ASS’Y	[M]
7	RFKGAPM193PS	FRONT PANEL ASS’Y	[M]
7-1	RGPV0021B-Q	FL WINDOW	[M]
8	RGKV0043-S	CENTER ORNAMENT	[M]
9	RGLV0011	AC IN LIGHTING TIP	[M]
10	RKSX0056V-H	REAR CABINET	[M]
11	RGU2280-S	CASS EJECT BUTTON	[M]
12	RGU2281-1S	FAMILY BUTTON A	[M]
13	RGUV0040-S	SSEQ BUTTON	[M]
14	RGUV0064-S	FF BUTTON	[M]
15	RGUV0066-S	FAMILY BUTTON B	[M]
16	RGW0406-S	VOLUME KNOB	[M]
17	RHD30007-1SJ	SCREW	[M]
18	RHGV0008	LEG CUSHION	[M]
19	RKF0688-S	CASS LID	[M]
20	RKM0502-1S	SIDE PANEL L	[M]
21	RKM0503-1S	SIDE PANEL R	[M]
22	RKM0504A-S	TOP CABINET	[M]
23	RMB0448-J	LOCK ROD SPRING	[M]
24	RMB0780	CASS OPEN SPRING	[M]
25	RMB0783	CD LID OPEN SPRING	[M]
26	RMK0595	BOTTOM CHASSIS	[M]
27	RMKX0090	INNER CHASSIS	[M]
28	RMM0163-1	CASSETTE LOCK ROD	[M]
29	RMN0780	CD LID SUPPORT	[M]
30	RMNV0014	FL HOLDER	[M]
31	RMY0260	HEAT SINK (SMALL)	[M]
32	RSCV0019	REAR SHIELD PLATE	[M]
33	RSCV0023	FL SHIELD PLATE	[M]
34	RUS757ZAA	CASS HALF SPRING	[M]
35	RXGX0003	DAMPER GEAR	[M]
36	RXXX0043	HEAT SINK UNIT	[M]
37	XTB3+10JFZ	SCREW	[M]
38	XTB3+8JFZ	SCREW	[M]
39	XTBS26+10J	SCREW	[M]
42	XTV3+10G	SCREW	[M]
43	XTW3+15T	SCREW	[M]
44	XTWS26+10Q	SCREW	[M]
45	XTWS3+6T	SCREW	[M]

22.4. Electrical Part List

Ref. No.	Part No.	Part Name & Description	Remarks
		P.C.B.	[M]
	REPV0016B	DECK P.C.B. / TAPE EJECT P.C.B.	[M] / (RTL)
	REPV0017A	MAIN P.C.B./ SPEAKER TERMINAL P.C.B. / TACT SWITCH P.C.B. / SWITCH P.C.B. / PANEL P.C.B. / HEADPHONE P.C.B. /	[M] / (RTL)
	REPV0018A	POWER P.C.B. / TRANSFORMER P.C.B.	[M] / (RTL)
	REPX0321H	DECK MECHANISM P.C.B.	[M] / (RTL)
	REP3569A	CD LOADING P.C.B.	[M] / (RTL)
	REPV0010A	CD SERVO P.C.B.	[M] / (RTL)
		INTEGRATED CIRCUITS	
IC11	C0GAG0000007	IC DRIVER	[M]
IC21	C0GAG0000007	IC DRIVER	[M]
IC300	C1BB00000757	IC ASP	[M]
IC302	C2CBJF000016	IC MICRO PROCESSOR	[M]
IC500	RSN314H41A-P	IC POWER AMP HIC	[M]
IC501	C0AABB000125	IC OP AMP	[M]
IC503	C0CAABE00006	IC 3.3V REGULATOR	[M]
IC600	C0HBB0000039	IC FL DRIVER	[M]
IC701	AN22004A-NF	IC HEAD AMP	[M]
IC702	MN6627934CH	IC LSI	[M]
IC703	BA5948FPE2	IC 4 CH DRIVE	[M]
IC704	C3ABMB000027	IC 16M DRAM	[M]
IC971	CNB13030R2AU	IC PHOTO INTERUPTOR	[M]
IC1000	C1AA00000612	IC ANALOG SW	[M]
IC1001	AN7326K	IC DECK R/P	[M]
		TRANSISTORS	
Q1	B3NAA0000068	TRANSISTOR	[M]
Q200	KRA102STA	TRANSISTOR	[M]
Q201	KTC3875GRTA	TRANSISTOR	[M]
Q222	KTC3875GRTA	TRANSISTOR	[M]
Q223	KTC3875GRTA	TRANSISTOR	[M]
Q224	KTC3875GRTA	TRANSISTOR	[M]
Q301	KTA1504GRTA	TRANSISTOR	[M]
Q302	KRC102STA	TRANSISTOR	[M]
Q303	KTA1504GRTA	TRANSISTOR	[M]
Q304	B1GBCFGG0001	TRANSISTOR	[M]
Q305	B1GBCFGG0001	TRANSISTOR	[M]
Q306	KRC103STA	TRANSISTOR	[M]
Q307	KTC3875GRTA	TRANSISTOR	[M]
Q308	KTC3875GRTA	TRANSISTOR	[M]
Q309	KRC101STA	TRANSISTOR	[M]
Q310	KRC101STA	TRANSISTOR	[M]
Q400	KRA102STA	TRANSISTOR	[M]
Q422	KTC3875GRTA	TRANSISTOR	[M]
Q423	KTC3875GRTA	TRANSISTOR	[M]
Q424	KTC3875GRTA	TRANSISTOR	[M]
Q501	KTC2026	TRANSISTOR	[M]
Q502	KTA1046	TRANSISTOR	[M]
Q505	KTA1267GRTA	TRANSISTOR	[M]
Q506	KTA1046	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q508	KTC3199GRTA	TRANSISTOR	[M]
Q509	KRA110MTA	TRANSISTOR	[M]
Q514	2SD0592ARA	TRANSISTOR	[M]
Q515	KTC3199GRTA	TRANSISTOR	[M]
Q516	KTC3199GRTA	TRANSISTOR	[M]
Q517	KTC32030YTA	TRANSISTOR	[M]
Q519	B1AAGC000006	TRANSISTOR	[M]
Q520	KTC2026	TRANSISTOR	[M]
Q575	B1AAGC000006	TRANSISTOR	[M]
Q577	2SC3940ARA	TRANSISTOR	[M]
Q578	KRC102MTA	TRANSISTOR	[M]
Q579	2SB0621AHA	TRANSISTOR	[M]
Q600	KRC119STA	TRANSISTOR	[M]
Q610	KTC3875GRTA	TRANSISTOR	[M]
Q700	B1AACF000063	TRANSISTOR	[M]
Q701	2SA1037AKSTX	TRANSISTOR	[M]
Q701	KTA12710YTA	TRANSISTOR	[M]
Q702	B1AACF000063	TRANSISTOR	[M]
Q703	B1AACF000063	TRANSISTOR	[M]
Q704	KRA102MTA	TRANSISTOR	[M]
Q710	B1AAGC000006	TRANSISTOR	[M]
Q711	B1AAGC000006	TRANSISTOR	[M]
Q714	KTC3199GRTA	TRANSISTOR	[M]
Q715	KTC3199GRTA	TRANSISTOR	[M]
Q716	KTC3199GRTA	TRANSISTOR	[M]
Q717	KTC3199GRTA	TRANSISTOR	[M]
Q718	B1AAGC000006	TRANSISTOR	[M]
Q719	B1AAGC000006	TRANSISTOR	[M]
Q720	KTC3199GRTA	TRANSISTOR	[M]
Q721	KTC3199GRTA	TRANSISTOR	[M]
Q722	KRA110MTA	TRANSISTOR	[M]
Q723	KTA12710YTA	TRANSISTOR	[M]
Q724	KTC3199GRTA	TRANSISTOR	[M]
Q725	B1AAGC000006	TRANSISTOR	[M]
Q726	B1AAGC000006	TRANSISTOR	[M]
Q1101	B1ABGC000005	TRANSISTOR	[M]
Q1201	B1ABGC000005	TRANSISTOR	[M]
Q1302	B1GDCFJJ0002	TRANSISTOR	[M]
Q1303	B1GBCFGH0001	TRANSISTOR	[M]
Q1304	B1GDCFGH0002	TRANSISTOR	[M]
Q1309	B1AAGC000006	TRANSISTOR	[M]
Q1310	B1AAGC000006	TRANSISTOR	[M]
Q1312	B1ABCF000011	TRANSISTOR	[M]
Q1314	B1GDCFGH0002	TRANSISTOR	[M]
Q1315	KTA12710YTA	TRANSISTOR	[M]
Q1316	2SD09650RA	TRANSISTOR	[M]
Q1317	B1ABGC000005	TRANSISTOR	[M]
		DIODES	
D201	B0BC01000014	DIODE	[M]
D302	1SS380TE-17	DIODE	[M]
D303	1SS380TE-17	DIODE	[M]
D304	MA729TX	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D305	B0ACCK000005	DIODE	[M]
D500	B0EBNL000004	DIODE	[M]
D505	B0AACK000004	DIODE	[M]
D508	MTZJ15BTA	DIODE	[M]
D515	B0BA9R600002	DIODE	[M]
D517	B0BA5R600016	DIODE	[M]
D520	B0BA9R600002	DIODE	[M]
D524	B0BA01100004	DIODE	[M]
D525	B0AACK000004	DIODE	[M]
D526	B0AACK000004	DIODE	[M]
D527	B0AACK000004	DIODE	[M]
D530	B0AACK000004	DIODE	[M]
D531	B0BA8R200005	DIODE	[M]
D578	B0EAKM000117	DIODE	[M]
D579	B0EAKM000117	DIODE	[M]
D580	B0EAKM000117	DIODE	[M]
D581	B0EAKM000117	DIODE	[M]
D582	B0BA6R600008	DIODE	[M]
D584	B0EAKM000117	DIODE	[M]
D585	B0EAKM000117	DIODE	[M]
D586	B0EAKM000117	DIODE	[M]
D587	B0EAKM000117	DIODE	[M]
D588	B0EAKM000117	DIODE	[M]
D589	B0EAKM000117	DIODE	[M]
D592	B0EAKM000117	DIODE	[M]
D593	B0EAKM000117	DIODE	[M]
D594	B0BA03000015	DIODE	[M]
D600	UDZSTE176R8B	DIODE	[M]
D601	LNJ801TPSJA	DIODE	[M]
D609	SLI325URCT31	DIODE	[M]
D700	B0AACK000004	DIODE	[M]
D701	B0AACK000004	DIODE	[M]
D702	B0AACK000004	DIODE	[M]
D703	B0AACK000004	DIODE	[M]
D704	B0AACK000004	DIODE	[M]
D705	B0AACK000004	DIODE	[M]
D706	B0AACK000004	DIODE	[M]
D707	B0AACK000004	DIODE	[M]
D708	MA2C16500E	DIODE	[M]
D709	MA2C16500E	DIODE	[M]
D750	MAZ80560ML	DIODE	[M]
D971	MA2C16500E	DIODE	[M]
D1301	B0ACCK000005	DIODE	[M]
		VARIABLE RESISTORS	
VR600	EVEJ1CF2524B	VOLUME ENCODER	[M]
		SWITCHES	
S1	K0L1BA000065	SW STOCK	[M]
S2	K0L1BA000065	SW PLAY	[M]
S3	K0L1BA000078	SW BOTTOM	[M]
S4	RSH1A045-1A	SW OPEN	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
S5	K0L1BA000065	SW CHANGE	[M]
S601	EVQ21405RJ	SW CD 1	[M]
S602	EVQ21405RJ	SW CD 2	[M]
S603	EVQ21405RJ	SW CD 3	[M]
S604	EVQ21405RJ	SW CD 4	[M]
S605	EVQ21405RJ	SW CD 5	[M]
S606	EVQ21405RJ	SW CD	[M]
S607	EVQ21405RJ	SW TAPE	[M]
S608	EVQ21405RJ	SW TUNER/BAND	[M]
S609	EVQ21405RJ	SW TRACK UP	[M]
S610	EVQ21405RJ	SW TRACK DOWN	[M]
S611	EVQ21405RJ	SW ENTER	[M]
S613	EVQ21405RJ	SW STOP/DEMO	[M]
S614	EVQ21405RJ	SW POWER	[M]
S615	EVQ21405RJ	SW AUX	[M]
S616	EVQ21405RJ	SW REV	[M]
S617	EVQ21405RJ	SW ALL DISC	[M]
S618	EVQ21405RJ	SW FF	[M]
S619	EVQ21405RJ	SW REC	[M]
S620	EVQ21405RJ	SW OPEN/CLOSE	[M]
S621	EVQ21405RJ	SW CD CHANGE	[M]
S623	EVQ21405RJ	SW SSEQ	[M]
S701	RSH1A048-A	SW RESET	[M]
S971	RSH1A018-3U	SW MODE	[M]
S972	RSH1A019-2U	SW HALF	[M]
S973	RSH1A019-2U	SW CR02	[M]
S975	RSH1A019-2U	SW RECINH_F	[M]
S1901	EVQ21405RJ	SW TAPE EJECT	[M]
		CONNECTORS	
CN1	K1MN14B00066	14P FFC CONNECTOR	[M]
CN101	K1KA10A00263	10P CONNECTOR	[M]
CN301	RJU100W13	13P CONNECTOR	[M]
CN302	K1KB11A00020	11P CONNECTOR	[M]
CN303	K1KA02A00008	FAN CONNECTOR	[M]
CN305	K1MN14C00004	14P FFC CONNECTOR	[M]
CN306	K1MN17C00002	17P FFC CONNECTOR	[M]
CN308	K1MN24B00090	24FFC CONNECTOR	[M]
CN309	K1MN21A00031	21P CONNECTOR	[M]
CN504	RJT119W08V	8P CONNECTOR	[M]
CN505	K1KB07A00016	7P CONNECTOR	[M]
CN506	RJT119W06V	6P CONNECTOR	[M]
CN507A	REXX0320	2P STANDBY WIRE (CN507B)	[M]
CN603A	K1KA09A00099	CONNECTOR	[M]
CN606	K1MN24A00040	24P FFC CONNECTOR	[M]
CN701	RJS2A8616	16P FPC CONNECTOR	[M]
CN702	RJS2A7717	17P FFC CONNECTOR	[M]
CN1305	K1MN21B00010	21P FFC CONNECTOR	[M]
CP501	RJT100W13	13P CONNECTOR	[M]
CP502	K1KA11A00093	11P CONNECTOR	[M]
CP1301	RJS1A6805-J	CONNECTOR	[M]
CP1902	K1KA09B00058	9P CONNECTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
CS971	RJU071H09M1	CONNECTOR	[M]
		COILS & TRANSFORMERS	
L203	J0JBC0000019	CHIP INDUCTOR	[M]
L300	G0C3R3JA0027	COIL	[M]
L301	G0A200D00002	RF CHOKE COIL	[M]
L503	RLQZ371	CHOKE COIL	[M] ⚠
L600	RLQB101JTD-D	INDUCTOR	[M]
L601	RLQB101JTD-D	INDUCTOR	[M]
L602	G0C100JA0030	INDUCTOR	[M]
L603	G0C101JA0027	COIL	[M]
L604	G0C3R3JA0027	COIL	[M]
L1301	7L1A62N	BIAS OCS COIL	[M]
L1302	RLQB470JTD-D	RF CHOKE COIL	[M]
T501	G4C6BDD00001	POWER TRANSFROMER	[M] ⚠
T502	ETP28KBZA1PU	SUB TRANSFORMER	[M] ⚠
		COMPONENT COMBINATION	
Z301	ENG06802QF	TUNER PACK	[M]
Z501	ERZV10V511CS	ZENER	[M] ⚠
Z601	B3MAZ0000023	R/CONTROL SENSOR	[M]
		RELAY	
RL501	K6B1ADA00011	RELAY	[M] ⚠
		OSCILLATORS	
X301	H2A100500006	RESONATOR	[M]
X302	RSXD32K7S02	CRYSTAL COSILLATOR	[M]
X701	RSXC16M9S04	CRYSTAL COSILLATOR	[M]
		DISPLAY TUBE	
FL600	A2BB00000131	FL DISPLAY	[M]
		FUSES	
F1	K5D162AQ0004	1.6A FUSE	[M] ⚠
		FUSE HOLDERS	
FC1	EYF52BC	FUSE HOLDER	[M]
FC2	EYF52BC	FUSE HOLDER	[M]
		FUSE PROTECTORS	
FP501	K5G402AA0002	FUSE PROTECTOR	[M] ⚠
FP502	K5G102AA0002	FUSE PROTECTOR	[M] ⚠

Ref. No.	Part No.	Part Name & Description	Remarks
		HOLDERS	
H303	K1YF08000003	8P WIRE HOLDER	[M]
H503	K1YF06000002	6P WIRE HOLDER	[M]
H601A	RMR0313	CABLE HOLDER	[M]
H601B	RMR0313	CABLE HOLDER	[M]
H603B	RMR0318	9P WIRE HOLDER	[M]
H605A	RMR0315	6P WIRE HOLDER	[M]
H605B	RMR0315	6P WIRE HOLDER	[M]
H606	RMR0316	7P WIRE HOLDER	[M]
		JACKS	
JK301	K4BC08B00013	JK SPEAKER	[M]
JK303	K4BK02B00007	JK AUX-IN	[M]
JK501	K2AB2B000002	JK AC INLET	[M] ⚠
JK600	RJJ37TK07-X	JK HEADPHONE	[M]
		EARTH TERMINAL	
E300	SNE1004-2	EARTH TERMINAL	[M]
E501	SNE1004-2	EARTH TERMINAL	[M]
		CHIP RESISTORS	
WA100	ERJ3GEY0R00V	0 1/16W	[M]
WA101	ERJ3GEY0R00V	0 1/16W	[M]
WA102	ERJ3GEY0R00V	0 1/16W	[M]
WA103	ERJ3GEY0R00V	0 1/16W	[M]
WA104	ERJ3GEY0R00V	0 1/16W	[M]
WA107	ERJ3GEY0R00V	0 1/16W	[M]
WA108	ERJ3GEY0R00V	0 1/16W	[M]
WA109	ERJ3GEY0R00V	0 1/16W	[M]
WA110	ERJ3GEY0R00V	0 1/16W	[M]
WA113	ERJ3GEY0R00V	0 1/16W	[M]
WA114	ERJ3GEY0R00V	0 1/16W	[M]
WA115	ERJ3GEY0R00V	0 1/16W	[M]
WA116	ERJ3GEY0R00V	0 1/16W	[M]
WR1308A	RWJ0102110SS	2P (DECK-TAPE EJECT) (WR1308B)	[M]
WR1903	RWJ0102050KR	2P (MOTOR WIRE)	[M]
		RESISTORS	
R201	ERJ3GEYJ181V	180 1/16W	[M]
R209	ERJ3GEYJ103V	10K 1/16W	[M]
R209	ERJ3GEYJ104V	100K 1/16W	[M]
R210	ERJ3GEYJ104V	100K 1/16W	[M]
R211	ERJ3GEYJ182V	1.8K 1/16W	[M]
R218	ERJ3GEYJ392V	3.9K 1/16W	[M]
R219	ERJ3GEYJ391V	390 1/16W	[M]
R220	ERJ3GEYJ272V	2.7K 1/16W	[M]
R221	ERJ3GEYJ123V	12K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R222	ERJ3GEYJ102V	1K 1/16W	[M]
R224	ERJ3GEYJ392V	3.9K 1/16W	[M]
R230	ERDS1FVJ100T	10 1/2W	[M]
R231	ERDS1FVJ100T	10 1/2W	[M]
R271	ERJ6GEYJ394V	390K 1/10W	[M]
R272	ERJ6GEYJ272V	2.7K 1/10W	[M]
R273	ERJ3GEYJ102V	1K 1/16W	[M]
R274	ERJ3GEYJ102V	1K 1/16W	[M]
R275	ERJ3GEYJ182V	1.8K 1/16W	[M]
R276	ERJ3GEYJ392V	3.9K 1/16W	[M]
R301	ERJ3GEYJ472V	4.7K 1/16W	[M]
R306	ERJ3GEYJ103V	10K 1/16W	[M]
R307	ERJ3GEYJ101V	100 1/16W	[M]
R308	ERJ3GEYJ101V	100 1/16W	[M]
R309	ERJ3GEYJ103V	10K 1/16W	[M]
R310	ERJ3GEYJ103V	10K 1/16W	[M]
R311	ERJ3GEYJ103V	10K 1/16W	[M]
R312	ERJ3GEYJ222V	2.2K 1/16W	[M]
R313	ERJ3GEYJ101V	100 1/16W	[M]
R314	ERJ3GEYJ101V	100 1/16W	[M]
R315	ERJ3GEYJ101V	100 1/16W	[M]
R316	ERJ3GEYJ101V	100 1/16W	[M]
R317	ERJ3GEYJ101V	100 1/16W	[M]
R318	ERJ3GEYJ101V	100 1/16W	[M]
R319	ERJ3GEYJ101V	100 1/16W	[M]
R320	ERJ3GEYJ101V	100 1/16W	[M]
R321	ERJ3GEYJ101V	100 1/16W	[M]
R322	ERJ3GEYJ101V	100 1/16W	[M]
R323	ERJ3GEYJ472V	4.7K 1/16W	[M]
R324	ERJ3GEYJ472V	4.7K 1/16W	[M]
R325	ERJ3GEYJ473V	47K 1/16W	[M]
R326	ERJ3GEYJ472V	4.7K 1/16W	[M]
R327	ERJ3GEYJ472V	4.7K 1/16W	[M]
R328	ERJ3GEYJ101V	100 1/16W	[M]
R329	ERJ3GEYJ102V	1K 1/16W	[M]
R330	ERJ3GEYJ474V	470K 1/16W	[M]
R331	ERJ3GEYJ103V	10K 1/16W	[M]
R332	ERJ3GEYJ474V	470K 1/16W	[M]
R333	ERJ3GEYJ472V	4.7K 1/16W	[M]
R334	ERJ3GEYJ102V	1K 1/16W	[M]
R335	ERJ3GEYJ101V	100 1/16W	[M]
R336	ERJ3GEYJ472V	4.7K 1/16W	[M]
R337	ERJ3GEYJ472V	4.7K 1/16W	[M]
R338	ERJ3GEYJ472V	4.7K 1/16W	[M]
R339	ERJ3GEYJ101V	100 1/16W	[M]
R340	ERJ3GEYJ101V	100 1/16W	[M]
R341	ERJ3GEYJ101V	100 1/16W	[M]
R342	ERJ3GEYJ103V	10K 1/16W	[M]
R343	ERJ3GEYJ103V	10K 1/16W	[M]
R344	ERJ3GEYJ103V	10K 1/16W	[M]
R345	ERJ3GEYJ103V	10K 1/16W	[M]
R346	ERJ3GEYJ103V	10K 1/16W	[M]
R347	ERJ3GEYJ103V	10K 1/16W	[M]
R348	ERJ3GEYJ103V	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R349	ERJ3GEYJ681V	680 1/16W	[M]
R350	ERJ3GEYJ473V	47K 1/16W	[M]
R351	ERJ3GEYJ473V	47K 1/16W	[M]
R352	ERJ3GEYJ472V	4.7K 1/16W	[M]
R353	ERJ3GEYJ472V	4.7K 1/16W	[M]
R354	ERJ3GEYJ681V	680 1/16W	[M]
R355	ERJ3GEYJ334V	330K 1/16W	[M]
R356	ERJ3GEYJ106V	10M 1/16W	[M]
R357	ERJ3GEYJ223V	22K 1/16W	[M]
R358	ERJ3GEYJ223V	22K 1/16W	[M]
R359	ERJ3GEYJ472V	4.7K 1/16W	[M]
R360	ERJ3GEYJ821V	820 1/16W	[M]
R361	ERJ3GEYJ103V	10K 1/16W	[M]
R362	ERJ3GEYJ471V	470 1/16W	[M]
R363	ERJ3GEYJ121V	120 1/16W	[M]
R364	ERJ3GEYJ101V	100 1/16W	[M]
R365	ERJ3GEYJ102V	1K 1/16W	[M]
R366	ERJ3GEYJ102V	1K 1/16W	[M]
R367	ERJ3GEYJ102V	1K 1/16W	[M]
R368	ERJ3GEYJ102V	1K 1/16W	[M]
R369	ERJ3GEYJ102V	1K 1/16W	[M]
R370	ERJ3GEYJ102V	1K 1/16W	[M]
R371	ERJ3GEYJ101V	100 1/16W	[M]
R372	ERJ3GEYJ223V	22K 1/16W	[M]
R373	ERJ3GEYJ122V	1.2K 1/16W	[M]
R374	ERJ3GEYJ122V	1.2K 1/16W	[M]
R375	ERDS1FVJ4R7T	4.7 1/2W	[M]
R377	ERJ3GEYJ223V	22K 1/16W	[M]
R378	ERJ3GEYJ101V	100 1/16W	[M]
R379	ERJ3GEYJ101V	100 1/16W	[M]
R381	ERJ3GEYJ101V	100 1/16W	[M]
R382	ERJ3GEYJ101V	100 1/16W	[M]
R383	ERJ3GEYJ103V	10K 1/16W	[M]
R384	ERJ3GEYJ472V	4.7K 1/16W	[M]
R385	ERJ3GEYJ101V	100 1/16W	[M]
R386	ERJ3GEYJ103V	10K 1/16W	[M]
R388	ERJ3GEYJ473V	47K 1/16W	[M]
R389	ERJ3GEYJ103V	10K 1/16W	[M]
R390	ERJ3GEYJ472V	4.7K 1/16W	[M]
R391	ERJ3GEYJ472V	4.7K 1/16W	[M]
R411	ERJ3GEYJ182V	1.8K 1/16W	[M]
R417	ERJ3GEYJ101V	100 1/16W	[M]
R418	ERJ3GEYJ392V	3.9K 1/16W	[M]
R419	ERJ3GEYJ391V	390 1/16W	[M]
R420	ERJ3GEYJ272V	2.7K 1/16W	[M]
R421	ERJ3GEYJ123V	12K 1/16W	[M]
R422	ERJ3GEYJ102V	1K 1/16W	[M]
R424	ERJ3GEYJ392V	3.9K 1/16W	[M]
R431	ERDS1FVJ100T	10 1/2W	[M]
R432	ERDS1FVJ100T	10 1/2W	[M]
R440	ERJ3GEYJ102V	1K 1/16W	[M]
R450	ERJ3GEYJ102V	1K 1/16W	[M]
R452	ERJ3GEYJ101V	100 1/16W	[M]
R453	ERJ3GEYJ101V	100 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R454	ERJ3GEYJ101V	100 1/16W	[M]
R455	ERJ3GEYJ472V	4.7K 1/16W	[M]
R456	ERJ3GEYJ472V	4.7K 1/16W	[M]
R457	ERJ3GEYJ472V	4.7K 1/16W	[M]
R458	ERJ3GEYJ472V	4.7K 1/16W	[M]
R459	ERJ3GEYJ101V	100 1/16W	[M]
R461	ERJ3GEYJ472V	4.7K 1/16W	[M]
R462	ERD2FCVG100T	10 1/4W	[M]
R471	ERJ6GEYJ394V	390K 1/10W	[M]
R472	ERJ6GEYJ272V	2.7K 1/10W	[M]
R473	ERJ3GEYJ102V	1K 1/16W	[M]
R474	ERJ3GEYJ102V	1K 1/16W	[M]
R475	ERJ3GEYJ182V	1.8K 1/16W	[M]
R476	ERJ3GEYJ392V	3.9K 1/16W	[M]
R503	ERC12UGK335D	3.3M 1/2W	[M]
R505	D0AE563JA048	56K 1/4W	[M]
R506	D0AE563JA048	56K 1/4W	[M]
R511	ERDS1FVJ102T	1K 1/2W	[M]
R512	ERDS1FVJ151T	150 1/2W	[M]
R514	D0AE563JA048	56K 1/4W	[M]
R515	D0AE563JA048	56K 1/4W	[M]
R517	ERDS2TJ331T	330 1/4W	[M]
R518	D0AE122JA048	1.2K 1/4W	[M]
R519	ERDS2TJ2R2T	2.2 1/4W	[M]
R520	ERDS2TJ2R2T	2.2 1/4W	[M]
R524	ERDS2TJ2R2T	2.2 1/4W	[M]
R526	ERDS2TJ103T	10K 1/4W	[M]
R532	ERDS2TJ153T	15K 1/4W	[M]
R533	ERDS2TJ153T	15K 1/4W	[M]
R534	ERDS1FVJ331T	330 1/2W	[M]
R536	ERDS1FVJ2R2T	2.2 1/2W	[M]
R537	ERDS2TJ222T	2.2K 1/4W	[M]
R539	ERDS1FVJ221T	220 1/2W	[M]
R540	ERDS2TJ153T	15K 1/4W	[M]
R541	ERDS2TJ153T	15K 1/4W	[M]
R542	ERDS2TJ332T	3.3K 1/4W	[M]
R543	ERDS2TJ332T	3.3K 1/4W	[M]
R544	D0AE562JA048	5.6K 1/4W	[M]
R545	D0AE562JA048	5.6K 1/4W	[M]
R546	D0AE223JA048	22K 1/4W	[M]
R547	ERDS2TJ124T	120K 1/4W	[M]
R548	ERDS2TJ224T	220K 1/4W	[M]
R549	ERDS1FVJ2R2T	2.2 1/2W	[M]
R550	ERDS1FVJ331T	330 1/2W	[M]
R551	ERDS2TJ104T	100K 1/4W	[M]
R554	ERDS1FVJ331T	330 1/2W	[M]
R556	ERDS1FVJ2R2T	2.2 1/2W	[M]
R561	ERDS2TJ104T	100K 1/4W	[M]
R562	ERDS2TJ394T	390K 1/4W	[M]
R565	ERDS2TJ123T	12K 1/4W	[M]
R566	ERDS2TJ103T	10K 1/4W	[M]
R567	ERDS2TJ151T	150 1/4W	[M]
R568	ERDS1FVJ150T	15 1/2W	[M]
R569	ERDS1FVJ270T	27 1/2W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R571	ERDS1FVJ332T	3.3K 1/2W	[M]
R572	ERDS2TJ561T	560 1/4W	[M]
R573	D0AE272JA048	2.7K 1/4W	[M]
R574	D0AE272JA048	2.7K 1/4W	[M]
R576	ERDS2TJ103T	10K 1/4W	[M]
R577	ERDS2TJ103T	10K 1/4W	[M]
R578	ERDS2TJ332T	3.3K 1/4W	[M]
R580	ERDS1FVJ180T	18 1/2W	[M]
R581	ERDS1FVJ180T	18 1/2W	[M]
R583	ERDS2TJ821T	820 1/4W	[M]
R584	ERDS2TJ151T	150 1/4W	[M]
R585	ERDS1FVJ220T	22 1/2W	[M]
R586	ERDS2TJ151T	150 1/4W	[M]
R587	D0AE472JA048	4.7K 1/4W	[M]
R589	ERD2FCVJ4R7T	4.7 1/4W	[M]
R591	ERDS2TJ101T	100 1/4W	[M]
R600	ERJ3GEYJ680V	68 1/16W	[M]
R601	ERJ3GEYJ680V	68 1/16W	[M]
R602	D0GB470JA008	47 1/16W	[M]
R603	ERJ3GEYJ273V	27K 1/16W	[M]
R604	ERJ3GEYJ103V	10K 1/16W	[M]
R605	ERJ3GEYJ223V	22K 1/16W	[M]
R606	ERJ3GEYJ123V	12K 1/16W	[M]
R607	ERJ3GEYJ102V	1K 1/16W	[M]
R608	ERJ3GEYJ102V	1K 1/16W	[M]
R609	ERJ3GEYJ122V	1.2K 1/16W	[M]
R610	ERJ3GEYJ182V	1.8K 1/16W	[M]
R611	ERJ3GEYJ222V	2.2K 1/16W	[M]
R612	ERJ3GEYJ222V	2.2K 1/16W	[M]
R613	ERJ3GEYJ272V	2.7K 1/16W	[M]
R614	ERJ3GEYJ102V	1K 1/16W	[M]
R615	ERJ3GEYJ102V	1K 1/16W	[M]
R616	ERJ3GEYJ122V	1.2K 1/16W	[M]
R617	ERJ3GEYJ102V	1K 1/16W	[M]
R618	ERJ3GEYJ102V	1K 1/16W	[M]
R619	ERJ3GEYJ122V	1.2K 1/16W	[M]
R620	ERJ3GEYJ182V	1.8K 1/16W	[M]
R621	ERJ3GEYJ182V	1.8K 1/16W	[M]
R622	ERJ3GEYJ222V	2.2K 1/16W	[M]
R623	ERJ3GEYJ272V	2.7K 1/16W	[M]
R624	ERJ3GEYJ472V	4.7K 1/16W	[M]
R626	ERJ3GEYJ682V	6.8K 1/16W	[M]
R627	ERJ3GEYJ472V	4.7K 1/16W	[M]
R629	ERJ6GEYJ471V	470 1/10W	[M]
R630	ERJ3GEYJ223V	22K 1/16W	[M]
R631	ERJ3GEYJ102V	1K 1/16W	[M]
R632	ERJ3GEYJ102V	1K 1/16W	[M]
R633	ERJ3GEYJ102V	1K 1/16W	[M]
R634	ERJ3GEYJ102V	1K 1/16W	[M]
R636	ERJ3GEYJ472V	4.7K 1/16W	[M]
R639	ERJ3GEYJ472V	4.7K 1/16W	[M]
R640	ERJ3GEYJ272V	2.7K 1/16W	[M]
R643	ERJ3GEYJ104V	100K 1/16W	[M]
R700	ERDS1FVJ180T	18 1/2W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R701	D0AE563JA048	56K 1/4W	[M]
R701	ERJ3GEYJ4R7V	4.7 1/16W	[M]
R702	ERDS2TJ101T	100 1/4W	[M]
R702	ERJ3GEYJ472V	4.7K 1/16W	[M]
R703	ERDS2TJ103T	10K 1/4W	[M]
R704	D0AE563JA048	56K 1/4W	[M]
R704	ERJ3GEYJ102V	1K 1/16W	[M]
R705	ERDS2TJ103T	10K 1/4W	[M]
R705	ERJ3GEYJ393V	39K 1/16W	[M]
R706	D0AE472JA048	4.7K 1/4W	[M]
R706	ERJ3GEYJ102V	1K 1/16W	[M]
R707	D0AE562JA048	5.6K 1/4W	[M]
R707	ERJ3GEY0R00V	0 1/16W	[M]
R708	ERDS2TJ103T	10K 1/4W	[M]
R708	ERJ3GEY0R00V	0 1/16W	[M]
R709	ERDS2TJ824T	820K 1/4W	[M]
R709	ERJ3GEYJ104V	100K 1/16W	[M]
R710	D0AE563JA048	56K 1/4W	[M]
R711	ERDS2TJ824T	820K 1/4W	[M]
R711	ERJ3GEYJ823V	82K 1/16W	[M]
R712	ERDS2TJ102T	1K 1/4W	[M]
R712	ERJ3GEYJ821V	820 1/16W	[M]
R713	D0AE563JA048	56K 1/4W	[M]
R714	ERJ3GEYJ471V	470 1/16W	[M]
R715	ERJ3GEYJ332V	3.3K 1/16W	[M]
R717	ERJ3GEYJ102V	1K 1/16W	[M]
R718	ERJ3GEYJ102V	1K 1/16W	[M]
R720	ERDS2TJ823T	82K 1/4W	[M]
R720	ERJ3GEYJ105V	1M 1/16W	[M]
R721	ERDS2TJ823T	82K 1/4W	[M]
R721	ERJ3GEYJ101V	100 1/16W	[M]
R722	ERDS2TJ104T	100K 1/4W	[M]
R723	ERDS2TJ102T	1K 1/4W	[M]
R723	ERJ3GEYJ332V	3.3K 1/16W	[M]
R724	ERDS2TJ104T	100K 1/4W	[M]
R725	ERDS2TJ102T	1K 1/4W	[M]
R725	ERJ3GEYJ331V	330 1/16W	[M]
R726	ERDS2TJ273T	27K 1/4W	[M]
R727	ERDS2TJ104T	100K 1/4W	[M]
R727	ERJ3GEYJ102V	1K 1/16W	[M]
R728	ERDS2TJ102T	1K 1/4W	[M]
R728	ERJ3GEYJ183V	18K 1/16W	[M]
R729	ERDS2TJ102T	1K 1/4W	[M]
R729	ERJ3GEYJ102V	1K 1/16W	[M]
R730	ERDS2TJ224T	220K 1/4W	[M]
R731	ERDS2TJ682T	6.8K 1/4W	[M]
R731	ERJ3GEYJ223V	22K 1/16W	[M]
R732	ERDS2TJ153T	15K 1/4W	[M]
R732	ERJ3GEYJ102V	1K 1/16W	[M]
R733	ERDS2TJ153T	15K 1/4W	[M]
R734	ERDS2TJ221T	220 1/4W	[M]
R735	ERDS2TJ224T	220K 1/4W	[M]
R735	ERJ3GEYJ101V	100 1/16W	[M]
R736	ERDS2TJ682T	6.8K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R736	ERJ3GEYJ101V	100 1/16W	[M]
R737	D0AE122JA048	1.2K 1/4W	[M]
R737	ERJ3GEYJ682V	6.8K 1/16W	[M]
R738	ERDS2TJ153T	15K 1/4W	[M]
R738	ERJ3GEYJ682V	6.8K 1/16W	[M]
R739	D0AE122JA048	1.2K 1/4W	[M]
R740	ERDS2TJ153T	15K 1/4W	[M]
R741	D0AE562JA048	5.6K 1/4W	[M]
R742	D0AE562JA048	5.6K 1/4W	[M]
R742	ERJ3GEYJ103V	10K 1/16W	[M]
R743	ERDS2TJ152T	1.5K 1/4W	[M]
R743	ERJ3GEYJ472V	4.7K 1/16W	[M]
R744	ERDS2TJ153T	15K 1/4W	[M]
R744	ERJ3GEYJ393V	39K 1/16W	[M]
R745	D0AE562JA048	5.6K 1/4W	[M]
R746	D0AE562JA048	5.6K 1/4W	[M]
R747	ERDS2TJ152T	1.5K 1/4W	[M]
R748	ERDS2TJ152T	1.5K 1/4W	[M]
R749	ERDS2TJ152T	1.5K 1/4W	[M]
R749	ERJ3GEYJ183V	18K 1/16W	[M]
R750	ERDS2TJ332T	3.3K 1/4W	[M]
R751	ERDS2TJ332T	3.3K 1/4W	[M]
R752	ERDS2TJ104T	100K 1/4W	[M]
R753	ERDS2TJ222T	2.2K 1/4W	[M]
R753	ERJ3GEYJ100V	10 1/16W	[M]
R754	D0GB5R6JA002	5.6 1/16W	[M]
R754	ERDS2TJ220T	22 1/4W	[M]
R755	ERDS2TJ220T	22 1/4W	[M]
R756	ERDS2TJ220T	22 1/4W	[M]
R757	ERDS2TJ220T	22 1/4W	[M]
R758	ERDS2TJ222T	2.2K 1/4W	[M]
R759	D0AE472JA048	4.7K 1/4W	[M]
R760	D0AE223JA048	22K 1/4W	[M]
R760	ERJ3GEYJ101V	100 1/16W	[M]
R761	D0AE223JA048	22K 1/4W	[M]
R761	ERJ3GEYJ103V	10K 1/16W	[M]
R762	D0AE562JA048	5.6K 1/4W	[M]
R762	ERJ3GEYJ103V	10K 1/16W	[M]
R763	D0AE562JA048	5.6K 1/4W	[M]
R763	ERJ3GEYJ103V	10K 1/16W	[M]
R764	ERDS2TJ683T	68K 1/4W	[M]
R764	ERJ3GEYJ102V	1K 1/16W	[M]
R765	ERDS2TJ683T	68K 1/4W	[M]
R766	ERDS2TJ822T	8.2K 1/4W	[M]
R767	ERDS2TJ822T	8.2K 1/4W	[M]
R768	D0AE472JA048	4.7K 1/4W	[M]
R769	D0AE472JA048	4.7K 1/4W	[M]
R770	ERDS2TJ332T	3.3K 1/4W	[M]
R771	ERDS2TJ104T	100K 1/4W	[M]
R772	D0AE472JA048	4.7K 1/4W	[M]
R773	ERDS2TJ102T	1K 1/4W	[M]
R774	ERDS2TJ104T	100K 1/4W	[M]
R775	ERDS2TJ153T	15K 1/4W	[M]
R776	ERDS2TJ102T	1K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R777	ERDS2TJ221T	220 1/4W	[M]
R778	ERDS2TJ153T	15K 1/4W	[M]
R779	ERDS2TJ153T	15K 1/4W	[M]
R780	D0AE473JA048	47K 1/4W	[M]
R781	D0AE473JA048	47K 1/4W	[M]
R788	ERDS2TJ104T	100K 1/4W	[M]
R789	ERDS2TJ104T	100K 1/4W	[M]
R790	D0AE272JA048	2.7K 1/4W	[M]
R791	D0AE272JA048	2.7K 1/4W	[M]
R792	ERDS2TJ561T	560 1/4W	[M]
R793	ERDS2TJ101T	100 1/4W	[M]
R794	ERDS2TJ103T	10K 1/4W	[M]
R797	ERD2FCVJ4R7T	4.7 1/4W	[M]
R798	ERDS2TJ102T	1K 1/4W	[M]
R799	ERDS2TJ102T	1K 1/4W	[M]
R972	ERDS2TJ821T	820 1/4W	[M]
R973	ERDS2TJ393T	39K 1/4W	[M]
R1061	ERJ3GEY0R00V	0 1/16W	[M]
R1063	ERJ3GEY0R00V	0 1/16W	[M]
R1101	ERJ3GEYJ330V	33 1/16W	[M]
R1102	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1103	ERJ3GEYJ183V	18K 1/16W	[M]
R1104	ERJ3GEYJ103V	10K 1/16W	[M]
R1105	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1106	ERJ3GEYJ104V	100K 1/16W	[M]
R1107	ERJ3GEYJ102V	1K 1/16W	[M]
R1109	ERJ3GEYJ102V	1K 1/16W	[M]
R1110	ERJ3GEYJ333V	33K 1/16W	[M]
R1201	ERJ3GEYJ330V	33 1/16W	[M]
R1202	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1203	ERJ3GEYJ183V	18K 1/16W	[M]
R1204	ERJ3GEYJ103V	10K 1/16W	[M]
R1205	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1206	ERJ3GEYJ104V	100K 1/16W	[M]
R1207	ERJ3GEYJ102V	1K 1/16W	[M]
R1209	ERJ3GEYJ102V	1K 1/16W	[M]
R1210	ERJ3GEYJ333V	33K 1/16W	[M]
R1302	ERJ3GEYJ471V	470 1/16W	[M]
R1303	ERJ3GEYJ475V	4.7M 1/16W	[M]
R1304	ERJ3GEYJ223V	22K 1/16W	[M]
R1305	ERJ3GEYJ103V	10K 1/16W	[M]
R1309	ERDS1FVJ471T	470 1/2W	[M]
R1313	ERJ3GEYJ103V	10K 1/16W	[M]
R1314	ERJ3GEYJ102V	1K 1/16W	[M]
R1318	ERJ3GEYJ103V	10K 1/16W	[M]
R1327	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1328	ERJ3GEYJ153V	15K 1/16W	[M]
R1329	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1330	ERD2FCVJ4R7T	4.7 1/4W	[M]
R1331	ERJ3GEYJ752V	7.5K 1/16W	[M]
R1332	ERJ3GEYJ103V	10K 1/16W	[M]
R1333	ERD2FCVJ4R7T	4.7 1/4W	[M]
R1334	ERJ3GEYJ223V	22K 1/16W	[M]
R1335	ERJ3GEYJ152V	1.5K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1337	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R1338	**ERJ3GEYJ472V**	**4.7K 1/16W**	**[M]**
R1341	**ERJ3GEYJ471V**	**470 1/16W**	**[M]**
R1342	**ERJ3GEYJ473V**	**47K 1/16W**	**[M]**
R1343	**ERJ3GEYJ332V**	**3.3K 1/16W**	**[M]**
R1344	**ERJ3GEYJ273V**	**27K 1/16W**	**[M]**
R1345	**ERJ3GEYJ102V**	**1K 1/16W**	**[M]**
R1371	**ERJ3GEYJ223V**	**22K 1/16W**	**[M]**
R1374	**ERJ3GEYJ471V**	**470 1/16W**	**[M]**
R1380	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
R1401	**ERJ3GEYJ123V**	**12K 1/16W**	**[M]**
R1402	**ERJ3GEYJ274V**	**270K 1/16W**	**[M]**
R1403	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R1404	**ERJ3GEYJ223V**	**22K 1/16W**	**[M]**
R1405	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
JW303	**REXV0019**	**8P WIRE (SPK-PWR)**	**[M]**
JW503	**REXV0020**	**6P WIRE (PWR-TRAN)**	**[M]**
JW601	**RWJ1104100XX**	**4P WIRE (PAN-SW)**	**[M]**
JW603	**REXV0024**	**9P WIRE (PAN TACT SW)**	**[M]**
JW605	**RWJ1106120XX**	**6P WIRE PHONE (PAN-HP)**	**[M]**
JW606	**RWJ0207180XQ**	**7P WIRE (PAN-TRAN)**	**[M]**
		CAPACITORS	
C11	**F1D1E103A001**	**0.01 25V**	**[M]**
C12	**F2A1C101A235**	**100P 16V**	**[M]**
C21	**F1D1E103A001**	**0.01 25V**	**[M]**
C22	**F2A1C101A235**	**100P 16V**	**[M]**
C200	**ECJ1VB1E183K**	**0.018 25V**	**[M]**
C201	**ECA1CAK101XB**	**100 16V**	**[M]**
C211	**ECJ1VB1H471K**	**470P 50V**	**[M]**
C212	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C214	**ECJ1VB1H221K**	**220P 50V**	**[M]**
C217	**ECJ1VC1H102J**	**1000P 50V**	**[M]**
C219	**ECA1CAK100XB**	**10 16V**	**[M]**
C220	**ECA1CAK100XB**	**10 16V**	**[M]**
C222	**ECA1CAK100XB**	**10 16V**	**[M]**
C224	**ECA1CAK100XB**	**10 16V**	**[M]**
C234	**ECA1EPX470B**	**47 25V**	**[M]**
C236	**F1H1E104A029**	**0.1 25V**	**[M]**
C237	**F1H1E104A029**	**0.1 25V**	**[M]**
C240	**F1H1E104A029**	**0.1 25V**	**[M]**
C241	**F1H1E104A029**	**0.1 25V**	**[M]**
C242	**F1H1H104A783**	**0.1 50V**	**[M]**
C243	**F1H1H104A783**	**0.1 50V**	**[M]**
C244	**F1H1H104A783**	**0.1 50V**	**[M]**
C245	**ECJ1VC1H181J**	**180P 50V**	**[M]**
C270	**ECJ1VB1H821K**	**820P 50V**	**[M]**
C271	**ECQV1H274JZ3**	**0.27 50V**	**[M]**
C272	**ECQV1H274JZ3**	**0.27 50V**	**[M]**
C301	**F1H1H104A783**	**0.1 50V**	**[M]**
C303	**ECJ1VB1H471K**	**470P 50V**	**[M]**
C304	**ECJ1VC1H101K**	**100P 50V**	**[M]**

Ref. No.	Part No.	Part Name & Description	Remarks
C305	ECJ1VC1H101K	100P 50V	[M]
C306	ECJ1VC1H101K	100P 50V	[M]
C308	ECJ1VC1H101K	100P 50V	[M]
C310	ECJ1VB1E103K	0.01 25V	[M]
C311	ECA1AM102B	1000 10V	[M]
C312	ECJ2VF1H104Z	0.1 50V	[M]
C313	ECA0JAK101XB	100 6.3V	[M]
C314	ECA1HAK010XB	1 50V	[M]
C315	ECJ1VC1H101K	100P 50V	[M]
C316	ECA1HAK2R2XB	2.2 50V	[M]
C317	ECJ1VC1H102J	1000P 50V	[M]
C318	ECJ1VC1H560J	56P 50V	[M]
C319	ECJ1VB1H102K	1000P 50V	[M]
C320	ECJ1VC1H560J	56P 50V	[M]
C321	ECJ1VC1H680J	68P 50V	[M]
C322	ECJ1VC1H680J	68P 50V	[M]
C323	ECJ1VC1H180J	18P 50V	[M]
C324	ECJ1VC1H220J	22P 50V	[M]
C325	ECJ1VB1E223K	0.022 25V	[M]
C326	F1H1H103A219	0.01 50V	[M]
C327	ECJ1VB1H221K	220P 50V	[M]
C329	ECJ1VC1H101K	100P 50V	[M]
C331	ECJ1VC1H101K	100P 50V	[M]
C333	ECJ1VB1H561K	560P 50V	[M]
C334	ECJ1VB1H561K	560P 50V	[M]
C335	ECJ1VB1H561K	560P 50V	[M]
C336	ECJ1VB1H561K	560P 50V	[M]
C337	ECJ1VB1H561K	560P 50V	[M]
C338	ECJ1VB1H561K	560P 50V	[M]
C339	ECJ1VB1H561K	560P 50V	[M]
C340	F1H1H104A783	0.1 50V	[M]
C341	ECA0JAK101XB	100 6.3V	[M]
C342	ECJ1VB1H102K	1000P 50V	[M]
C343	ECJ1VB1H103K	0.01 50V	[M]
C344	ECJ1VC1H101J	100P 50V	[M]
C345	ECJ1VC1H101J	100P 50V	[M]
C358	ECA1CAM221XB	220 16V	[M]
C359	ECEA1AKA101B	100 10V	[M]
C362	ECA1AAK220XB	22 10V	[M]
C363	ECJ1VC1H101J	100P 50V	[M]
C364	ECJ1VC1H101J	100P 50V	[M]
C367	F1H1H104A783	0.1 50V	[M]
C368	F1H1H104A783	0.1 50V	[M]
C372	ECA1HAK2R2XB	2.2 50V	[M]
C373	ECJ1VB1H471K	470P 50V	[M]
C374	ECJ1VB1H471K	470P 50V	[M]
C400	ECJ1VB1E183K	0.018 25V	[M]
C411	ECJ1VB1H471K	470P 50V	[M]
C412	ECJ1VB1H102K	1000P 50V	[M]
C414	ECJ1VB1H221K	220P 50V	[M]
C417	ECJ1VC1H102J	1000P 50V	[M]
C419	ECA1CAK100XB	10 16V	[M]
C420	ECA1CAK100XB	10 16V	[M]
C422	ECA1CAK100XB	10 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C424	ECA1CAK100XB	10 16V	[M]
C436	F1H1E104A029	0.1 25V	[M]
C437	F1H1E104A029	0.1 25V	[M]
C440	F1H1E104A029	0.1 25V	[M]
C441	F1H1E104A029	0.1 25V	[M]
C445	ECJ1VC1H181J	180P 50V	[M]
C470	ECJ1VB1H821K	820P 50V	[M]
C471	ECQV1H274JZ3	0.27 50V	[M]
C472	ECQV1H274JZ3	0.27 50V	[M]
C500	F1D1H821A012	820P 50V	[M]
C501	F1D1H821A012	820P 50V	[M]
C502	F1D1H821A012	820P 50V	[M]
C503	F1D1H821A012	820P 50V	[M]
C504	F1D1H330A041	33P 50V	[M]
C505	F1D1H330A041	33P 50V	[M]
C506	ECA1HAM222XE	2200 50V	[M]
C507	ECA1HAM222XE	2200 50V	[M]
C508	ECA1EAM332XE	3300 25V	[M]
C509	F1D1H330A041	33P 50V	[M]
C510	F1D1H330A041	33P 50V	[M]
C511	F1B1H103A007	0.01 50V	[M]
C512	ECA1EAM101XB	100 25V	[M]
C515	F1E1H1030001	0.01 50V	[M]
C516	ECA1HAK100XB	10 50V	[M]
C517	ECKR2H103ZF5	0.01 500V	[M]
C518	F1B1H103A007	0.01 50V	[M]
C520	F1B1H103A007	0.01 50V	[M]
C521	ECA1EAK330XB	33 25V	[M]
C526	ECA1HM330B	33 50V	[M]
C528	F1B1H103A007	0.01 50V	[M]
C530	ECQE1104KF3	0.1 100V	[M]
C533	ECQV1H104JZ3	0.1 50V	[M]
C536	ECA0JAK221XB	220 6.3V	[M]
C537	F1D1H102A012	1000P 50V	[M]
C538	ECA1HAK220XB	22 50V	[M]
C539	F1B1H103A007	0.01 50V	[M]
C548	ECKR1H103KB5	0.01 50V	[M]
C575	ECA1HAK4R7XB	4.7 50V	[M]
C578	F1B1H103A007	0.01 50V	[M]
C580	F1B1H103A007	0.01 50V	[M]
C581	ECA1HAM470XB	47 50V	[M]
C582	ECQE1104KF3	0.1 100V	[M]
C583	F1B1H103A007	0.01 50V	[M]
C584	ECA1CAM102XB	1000 16V	[M]
C585	ECA1EAM101XB	100 25V	[M]
C586	ECA2AM100B	10 100V	[M]
C587	ECA1JM101B	100 63V	[M]
C588	ECA1JM101B	100 63V	[M]
C600	ECA1HAK220XB	22 50V	[M]
C601	ECA1HAK220XB	22 50V	[M]
C602	ECA1HAK220XB	22 50V	[M]
C603	ECJ1VB1H102K	1000P 50V	[M]
C604	ECJ1VB1E223K	0.022 25V	[M]
C605	ECJ1VB1E223K	0.022 25V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C606	ECJ1VC1H470J	47P 50V	[M]
C608	ECEA0JKA470B	47 6.3V	[M]
C609	ECJ1VB1H103K	0.01 50V	[M]
C610	ECJ1VB1H102K	1000P 50V	[M]
C611	ECJ1VC1H101J	100P 50V	[M]
C612	ECJ1VC1H101J	100P 50V	[M]
C613	ECA1AAK220XB	22 10V	[M]
C614	ECJ1VB1H103K	0.01 50V	[M]
C615	ECJ1VB1H221K	220P 50V	[M]
C616	ECJ1VB1H221K	220P 50V	[M]
C617	ECJ1VB1H221K	220P 50V	[M]
C618	ECJ1VB1H221K	220P 50V	[M]
C619	F1H1H104A783	0.1 50V	[M]
C620	ECA1HAK220XB	22 50V	[M]
C621	F1H1H104A783	0.1 50V	[M]
C622	ECJ1VB1H221K	220P 50V	[M]
C640	ECJ1VC1H331J	330P 50V	[M]
C700	ECA0JAK101XB	100 6.3V	[M]
C701	ECA1EAK330XB	33 25V	[M]
C701	ECEA0JKA330I	33 6.3V	[M]
C702	ECA1HAK2R2XB	2.2 50V	[M]
C702	F1H1A474A025	0.47 10V	[M]
C703	ECEA0JKA101I	100 6.3V	[M]
C703	F1D1H1040002	0.1 50V	[M]
C704	ECA0JAK221XB	220 6.3V	[M]
C704	F1H1C104A065	0.1 16V	[M]
C705	ECEA1AKN100B	10 10V	[M]
C705	F1H1C104A065	0.1 16V	[M]
C706	ECJ1VF1A105Z	1 10V	[M]
C707	ECJ1VB1C393K	0.039 16V	[M]
C709	F1D1H102A012	1000P 50V	[M]
C710	ECJ1VC1H471J	470P 50V	[M]
C710	F1D1H102A012	1000P 50V	[M]
C711	ECA1CAK100XB	10 16V	[M]
C711	F1H1C104A065	0.1 16V	[M]
C712	F1D1C122A010	1200P 16V	[M]
C712	F1H1C104A065	0.1 16V	[M]
C713	ECEA1HKN2R2B	2.2 50V	[M]
C713	F1H1C104A065	0.1 16V	[M]
C714	ECEA0JKA101I	100 6.3V	[M]
C714	F1C1C273A003	0.027 16V	[M]
C715	F1D1C122A010	1200P 16V	[M]
C715	F1H1A474A025	0.47 10V	[M]
C716	ECEA1HKN2R2B	2.2 50V	[M]
C716	ECJ1VB1H681K	680P 50V	[M]
C717	F1C1C273A003	0.027 16V	[M]
C717	F1H1C104A065	0.1 16V	[M]
C718	ECJ1VB1C823K	0.082 16V	[M]
C719	ECEA1AKA101B	100 10V	[M]
C720	ECEA1HKN010B	1 50V	[M]
C721	F1D1C562A010	5600P 16V	[M]
C721	F1H1H220A230	22P 50V	[M]
C722	ECJ1VC1H270J	27P 50V	[M]
C722	F1D1C562A010	5600P 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C723	ECEA0JKA221I	220 6.3V	[M]
C723	ECEA1HKN010B	1 50V	[M]
C724	F1D1C562A010	5600P 16V	[M]
C724	F1H1C104A065	0.1 16V	[M]
C725	ECJ1VB1H102K	1000P 50V	[M]
C725	F1D1C562A010	5600P 16V	[M]
C726	ECA1CAK100XB	10 16V	[M]
C726	ECJ1VB1H102K	1000P 50V	[M]
C727	ECA1CAK100XB	10 16V	[M]
C727	ECA1HAK010XI	1 50V	[M]
C728	ECA1HAK010XI	1 50V	[M]
C728	F1D1H332A046	3300P 50V	[M]
C729	F1D1H332A046	3300P 50V	[M]
C729	F1H1C104A065	0.1 16V	[M]
C730	ECA1HAK3R3XB	3.3 50V	[M]
C730	F1H1C104A065	0.1 16V	[M]
C731	ECA0JAK221XI	220 6.3V	[M]
C731	ECA1HAK3R3XB	3.3 50V	[M]
C732	ECA1CAK221XB	220 16V	[M]
C733	ECA1HAKR47XB	0.47 50V	[M]
C733	F1H1C104A065	0.1 16V	[M]
C734	ECA1HAKR47XB	0.47 50V	[M]
C734	ECEA1AKA221I	220 10V	[M]
C735	F1H1E104A030	0.1 25V	[M]
C736	ECQV1H473JZ3	0.047 50V	[M]
C736	F1H1E104A030	0.1 25V	[M]
C737	ECJ1VB1E103K	0.01 25V	[M]
C737	ECQV1H473JZ3	0.047 50V	[M]
C738	ECA1CAK100XB	10 16V	[M]
C738	ECJ1VB1C563K	0.056 16V	[M]
C739	ECJ1VB1E183K	0.018 25V	[M]
C739	F1D1C122A010	1200P 16V	[M]
C740	F1D1C122A010	1200P 16V	[M]
C740	F1H1C104A065	0.1 16V	[M]
C741	ECA1HAKR47XB	0.47 50V	[M]
C741	ECJ1VB1H102K	1000P 50V	[M]
C742	ECA1HAKR47XB	0.47 50V	[M]
C742	ECJ1VB1C473K	0.047 16V	[M]
C743	F1E1H1030001	0.01 50V	[M]
C743	F1H1E104A030	0.1 25V	[M]
C744	ECJ1VB1E153K	0.015 25V	[M]
C744	F1E1H1030001	0.01 50V	[M]
C745	F1D1H101A012	100P 50V	[M]
C745	F1H1E104A030	0.1 25V	[M]
C746	F1D1H101A012	100P 50V	[M]
C746	F1H1C104A065	0.1 16V	[M]
C747	ECJ1VB1H471K	470P 50V	[M]
C747	F1D1H270A006	27P 50V	[M]
C748	F1D1H270A006	27P 50V	[M]
C748	F1H1C104A065	0.1 16V	[M]
C749	ECJ1VB1H392K	3900P 50V	[M]
C749	ECQB1H103JF3	0.01 50V	[M]
C750	ECQB1H103JF3	0.01 50V	[M]
C750	F1H1C104A065	0.1 16V	[M]

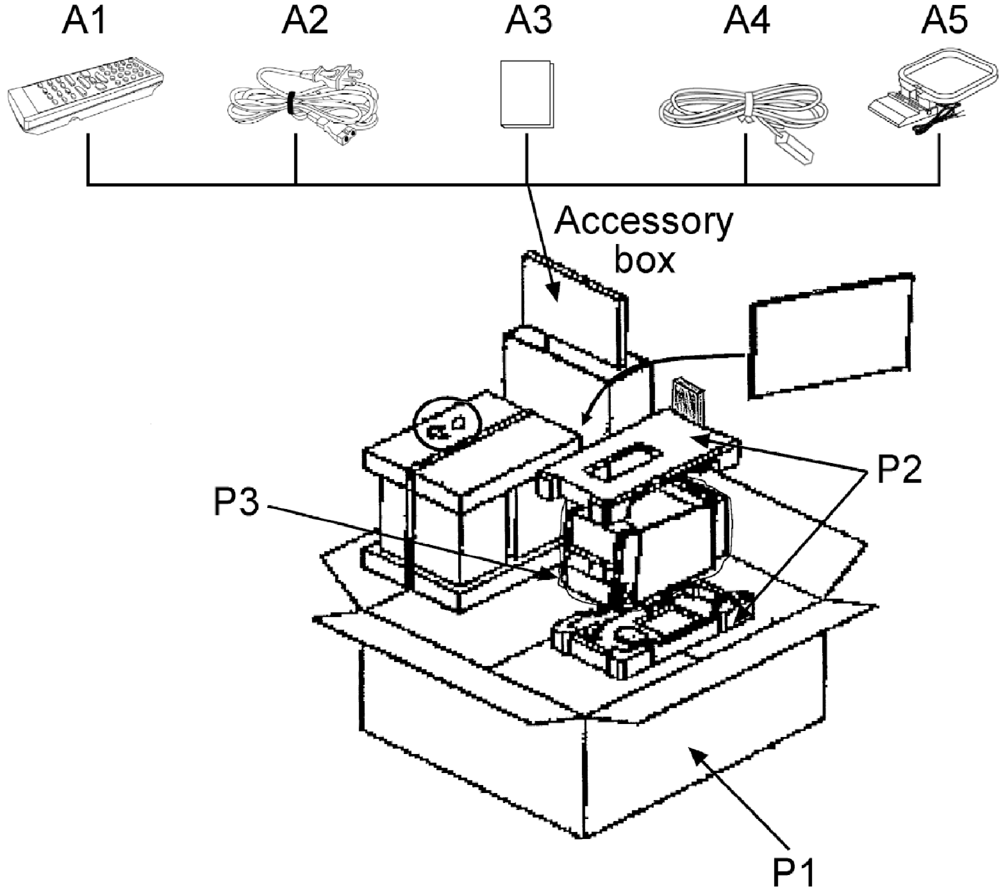
Ref. No.	Part No.	Part Name & Description	Remarks
C751	ECA1CAK100XB	10 16V	[M]
C751	F1H1C104A065	0.1 16V	[M]
C752	ECA1CAK100XB	10 16V	[M]
C752	ECJ1VB1E183K	0.018 25V	[M]
C753	ECJ1VB1H471K	470P 50V	[M]
C754	F1H1C104A065	0.1 16V	[M]
C755	F1H1C104A065	0.1 16V	[M]
C757	ECEA0JKA101I	100 6.3V	[M]
C758	F1H1C104A065	0.1 16V	[M]
C760	ECA1EAK330XB	33 25V	[M]
C761	F1B1H103A007	0.01 50V	[M]
C1101	ECA1HAK010XB	1 50V	[M]
C1102	ECJ1VB1H471K	470P 50V	[M]
C1103	ECA1CAK101XB	100 16V	[M]
C1104	ECJ1VB1E273K	0.027 25V	[M]
C1105	ECJ1VB1H471K	470P 50V	[M]
C1106	ECA1HAK2R2XB	2.2 50V	[M]
C1107	F1H1H152A219	1500P 50V	[M]
C1108	ECA1CAK100XB	10 16V	[M]
C1109	ECA1HAK3R3XB	3.3 50V	[M]
C1110	ECJ1VB1H682K	6800P 50V	[M]
C1121	ECJ1VB1H102K	1000P 50V	[M]
C1122	ECJ1VB1E103K	0.01 25V	[M]
C1123	ECJ1VB1H271K	270P 50V	[M]
C1201	ECA1HAK010XB	1 50V	[M]
C1202	ECJ1VB1H471K	470P 50V	[M]
C1203	ECA1CAK101XB	100 16V	[M]
C1204	ECJ1VB1E273K	0.027 25V	[M]
C1205	ECJ1VB1H471K	470P 50V	[M]
C1206	ECA1HAK2R2XB	2.2 50V	[M]
C1207	F1H1H152A219	1500P 50V	[M]
C1208	ECA1CAK100XB	10 16V	[M]
C1209	ECA1HAK3R3XB	3.3 50V	[M]
C1210	ECJ1VB1H682K	6800P 50V	[M]
C1221	ECJ1VB1H102K	1000P 50V	[M]
C1222	ECJ1VB1E103K	0.01 25V	[M]
C1223	ECJ1VB1H271K	270P 50V	[M]
C1301	ECA1HAK0R1XB	0.1 50V	[M]
C1302	ECJ1VB1C333K	0.033 16V	[M]
C1303	ECJ1VB1C333K	0.033 16V	[M]
C1304	ECEA1HKA4R7B	4.7 50V	[M]
C1305	ECA1CAK330XB	33 16V	[M]
C1307	ECA1AAK221XQ	220 10V	[M]
C1308	ECA1CAK220XB	22 16V	[M]
C1310	ECA1HAK0R1XB	0.1 50V	[M]
C1311	ECA1CAK470XB	47 16V	[M]
C1312	ECJ1VB1H332K	3300P 50V	[M]
C1314	ECJ1VB1H222K	2200P 50V	[M]
C1315	ECJ1VB1H222K	2200P 50V	[M]
C1316	ECJ1VB1H102K	1000P 50V	[M]
C1317	ECJ1VB1H102K	1000P 50V	[M]
C1318	ECQV1H473JZ3	0.047 50V	[M]
C1319	ECA1CAK101XB	100 16V	[M]
C1320	ECA1HAK010XB	1 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1321	F0A2A472A019	4700P 100V	[M]
C1323	ECEA1HKN010B	1 50V	[M]
C1324	ECA1CAK470XB	47 16V	[M]
C1326	ECA1CAK100XB	10 16V	[M]
C1371	ECJ1VB1E103K	0.01 25V	[M]
		CHIP JUMPER	
RJ701	ERJ3GEY0R00V	0 1/16W	[M]
RJ715	ERJ3GEY0R00V	0 1/16W	[M]
RJ716	ERJ3GEY0R00V	0 1/16W	[M]
RJ717	ERJ3GEY0R00V	0 1/16W	[M]
RJ718	ERJ3GEY0R00V	0 1/16W	[M]
RJ719	ERJ3GEY0R00V	0 1/16W	[M]
RJ720	ERJ3GEY0R00V	0 1/16W	[M]
RJ721	ERJ3GEY0R00V	0 1/16W	[M]
RJ722	ERJ3GEY0R00V	0 1/16W	[M]
RJ723	ERJ3GEY0R00V	0 1/16W	[M]
RJ724	ERJ3GEY0R00V	0 1/16W	[M]
RJ725	ERJ3GEY0R00V	0 1/16W	[M]

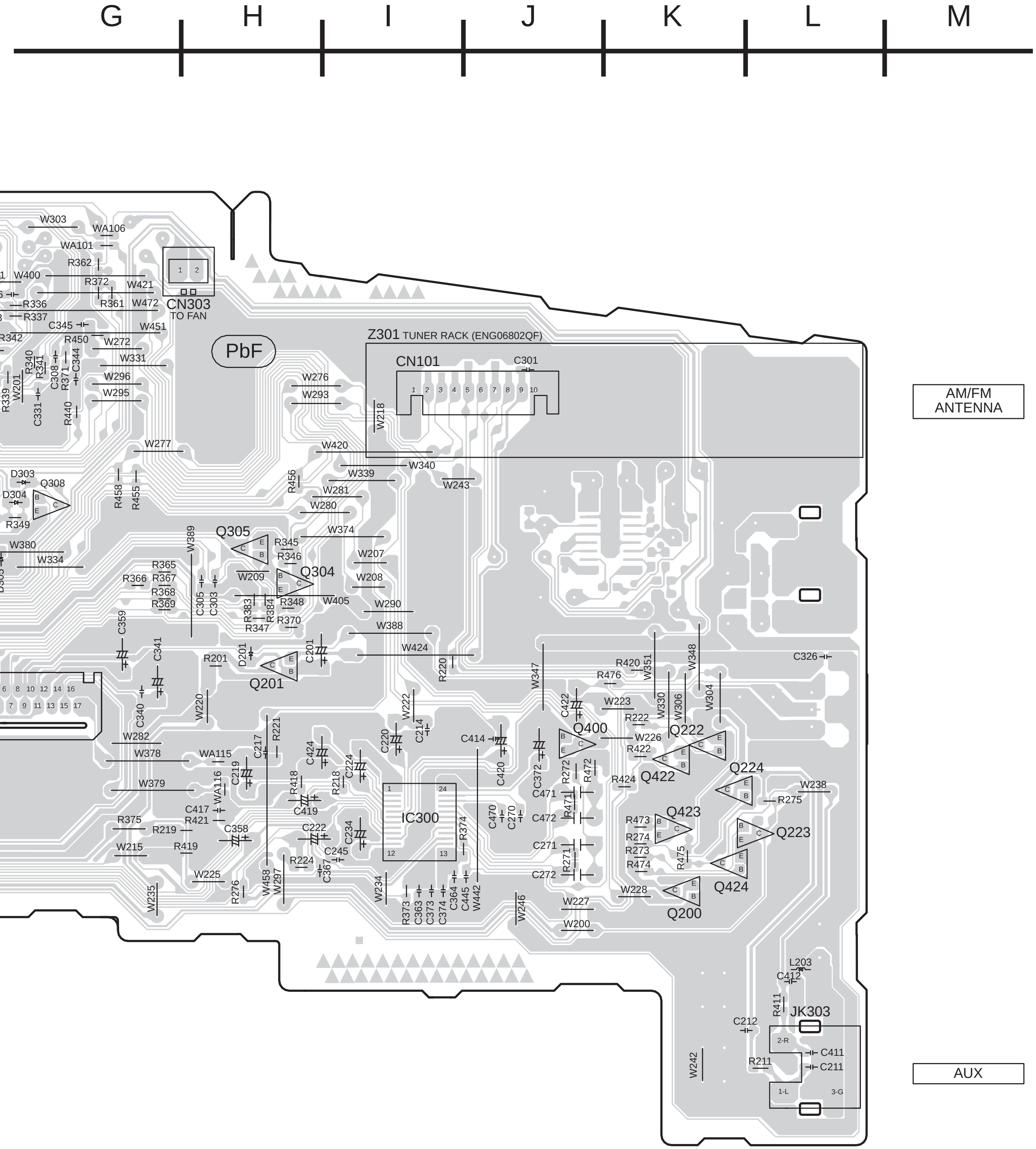
22.5. Packaging Materials & Accessories Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGV0113	PACKING CASE	[M]
P2	RPNV0026	POLYFOAM	[M]
P3	RPHV0001	MIRAMAT SHEET	[M]
		ACCESSORIES	
A1	EUR7711150	REMOTE CONTROL	[M]
A1-1	UR64EC2337J	R/C BATTERY COVER	[M]
A2	K2CB2CB00006	AC CORD	[M] ⚠
A3	RQT7364-P	O/I BOOK (EN)	[M]
A3	RQT7365-M	O/I BOOK (Sp)	[M]
A4	RSA0007-L	FM ANTENNA WIRE	[M]
A5	N1DAAAA00001	AM LOOP ANTENNA	[M]

22.6. Packaging


A1
A2
A3
A4
A5
Accessory box
P2
P3
P1

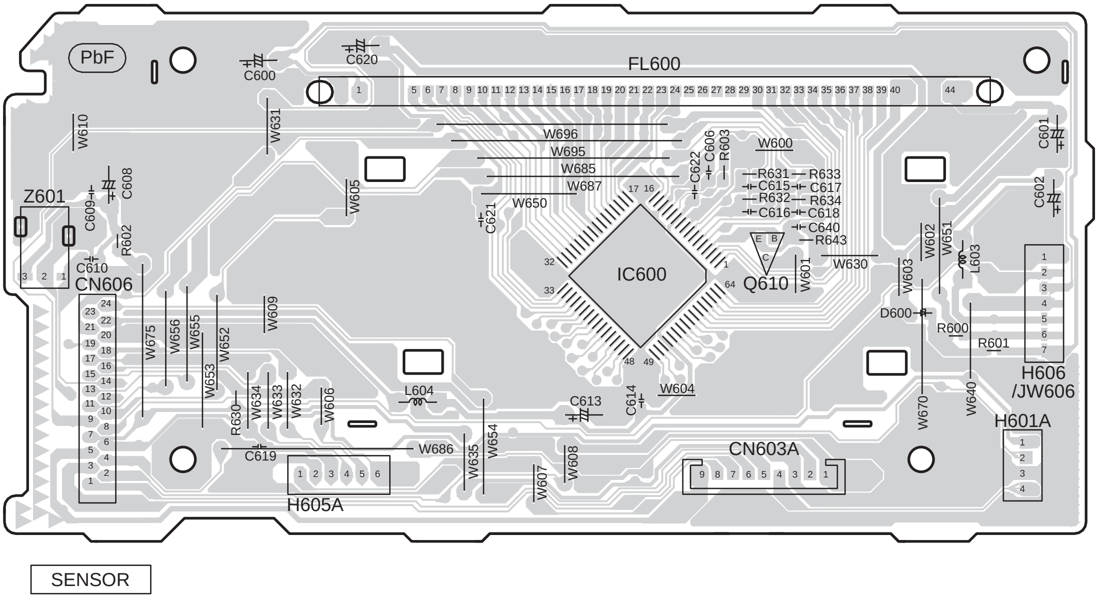
FLE0403 D/A/J/M/S/E


G
H
I
J
K
L
M
W303
WA106
WA101
R362
W400
R372
W421
R336
R361
W472
R337
C345
W451
R342
R450
W272
CN303
TO FAN
PbF
R340
R341
C308
R371
C344
W331
W296
W295
R339
W201
C331
R440
Z301 TUNER RACK (ENG06802QF)
CN101
C301
W276
W293
W218
AM/FM
ANTENNA
W277
W420
W340
W339
W243
D303
Q308
D304
R458
R455
R456
W281
W280
R349
W374
Q305
R345
R346
W380
W334
W389
Q304
W207
R365
R366
R367
W209
W208
R368
R369
C305
C303
R383
R384
R348
W405
W290
R370
R347
C359
W388
C341
D201
C201
W424
R201
Q201
R220
W347
R420
W351
W348
C326
R476
C340
W220
W222
C422
W223
W330
W306
W304
C214
R222
C220
Q400
Q222
W282
C414
W226
W378
WA115
C217
R221
C424
C224
R422
C219
WA116
C420
C372
R272
R472
R424
Q422
Q224
W379
R418
R218
IC300
W238
R275
C417
C419
C471
R471
C470
C270
C472
R473
Q423
R375
R421
R219
C358
C222
C234
R374
R274
Q223
W215
R419
C245
C271
R273
R475
R224
C367
R474
W225
R271
C272
Q424
W235
R276
W458
W297
W234
R373
C363
C373
C374
C364
C445
W442
W246
W227
W228
Q200
W200
L203
C412
R411
JK303
C212
2-R
C411
C211
R211
W242
AUX
1-L
3-G

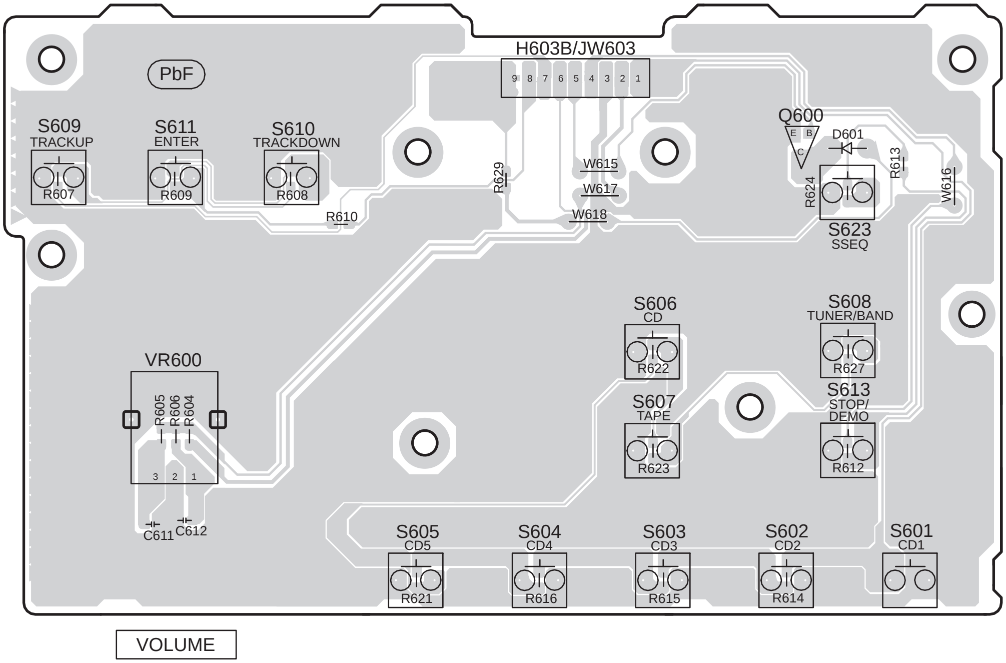
A B C D E F G

1 2 3 4 5 6 7 8 9

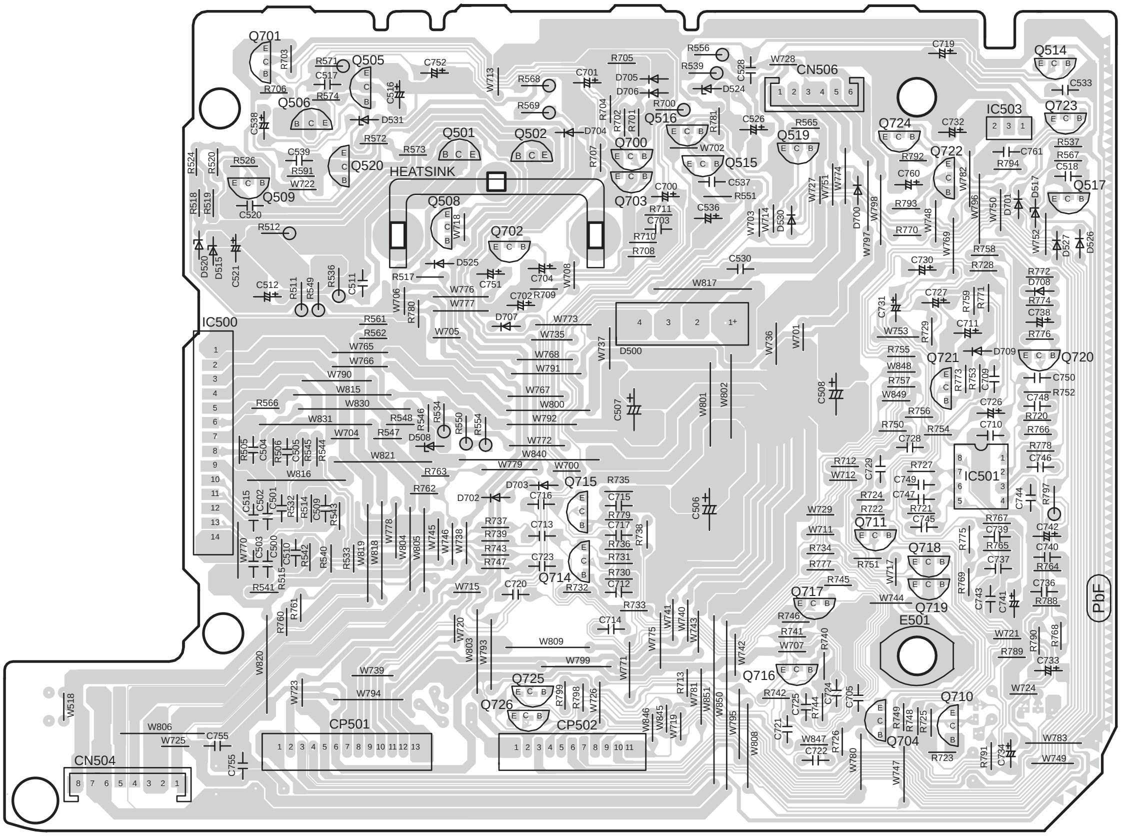
C PANEL P.C.B (REPV0017A)


PbF
C600
C620
FL600
1
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
44
W610
W631
W696
W695
W685
W687
W650
W605
C621
C622
C606
R603
W600
R631
R633
C615
C617
R632
R634
C616
C618
C640
R643
C601
C602
Z601
C609
C608
R602
C610
3 2 1
CN606
24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
W675
W656
W655
W652
W653
W609
IC600
17 16
32
33
1
64
48 49
E B C
Q610
W601
W630
W603
W602
W651
L603
D600
R600
R601
H606
/JW606
1 2 3 4 5 6 7
R630
W634
W633
W632
W606
L604
C613
C614
W604
W670
W640
H601A
1 2 3 4
C619
W686
W635
W654
W607
W608
1 2 3 4 5 6
H605A
CN603A
9 8 7 6 5 4 3 2 1
SENSOR

D TACT SWITCH P.C.B (REPV0017A)


PbF
H603B/JW603
9 8 7 6 5 4 3 2 1
S609
TRACKUP
R607
S611
ENTER
R609
S610
TRACKDOWN
R608
R610
R629
W615
W617
W618
Q600
E B C
D601
R613
R624
S623
SSEQ
W616
S606
CD
R622
S608
TUNER/BAND
R627
S607
TAPE
R623
S613
STOP/
DEMO
R612
VR600
R605
R606
R604
3 2 1
C611
C612
S605
CD5
R621
S604
CD4
R616
S603
CD3
R615
S602
CD2
R614
S601
CD1
VOLUME

J POWER P.C.B (REPV0018A)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
Q701
Q505
Q506
Q501
Q502
Q520
Q509
HEATSINK
Q508
Q702
Q700
Q703
Q516
Q515
Q519
CN506
Q724
Q722
Q514
IC503
Q723
Q517
IC500
D500
4
3
2
1+
Q721
Q720
IC501
Q715
Q714
Q711
Q718
Q719
Q717
E501
Q716
Q725
Q726
Q710
Q704
CP501
CP502
CN504
PbF
C508
C507
C506
W817
W802
W801
W736
W701

A B C D E F G

1

2

3

4

5

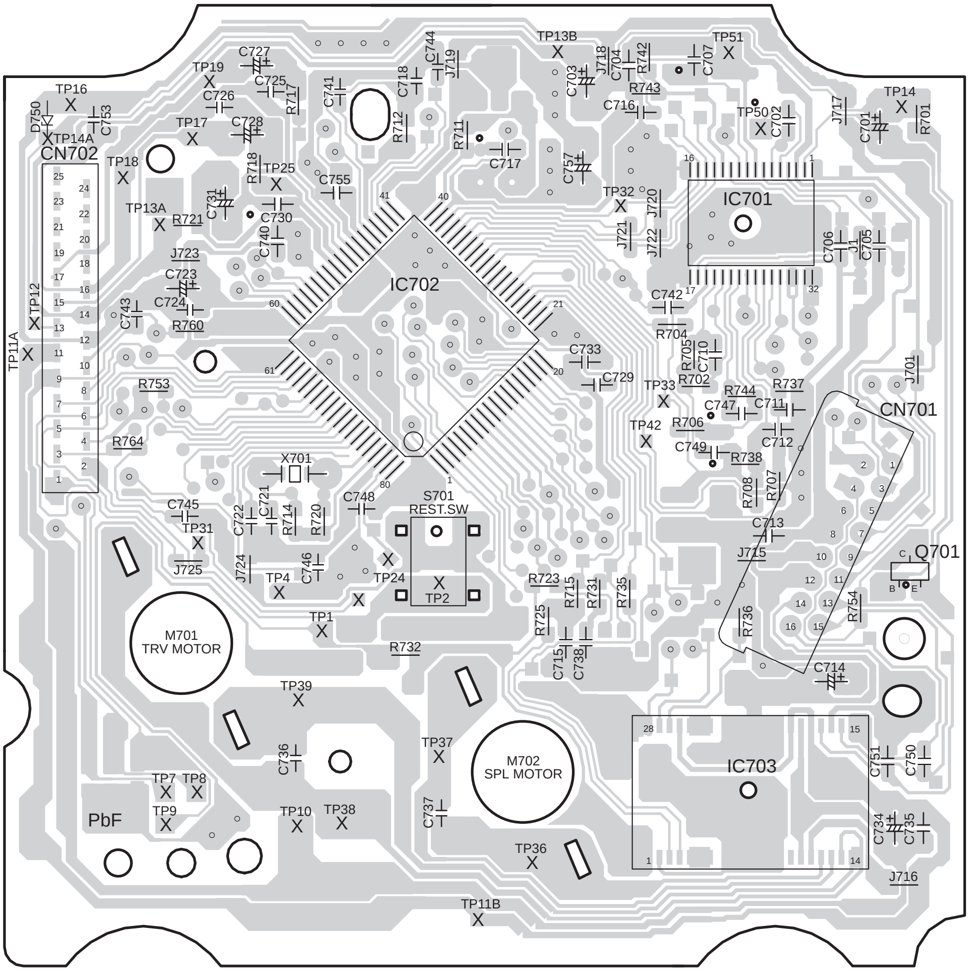
6

7

8

9

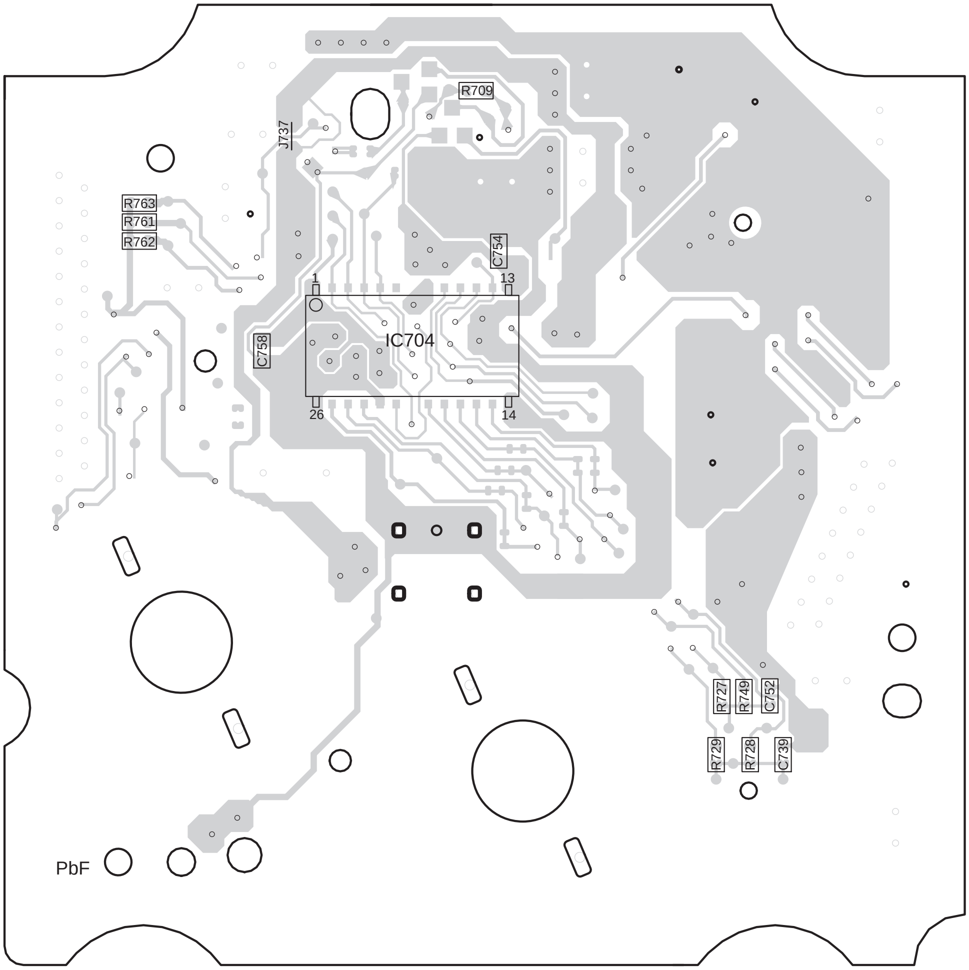
A CD SERVO P.C.B (REPV0010A)


TP16
D750
C753
TP14A
CN702
TP19
C727
C725
C726
R717
C741
C718
C744
J719
TP13B
C703
J718
C704
R742
R743
C716
C707
TP51
TP50
C702
J717
TP14
C701
R701
TP17
C728
R712
R711
C717
C757
TP18
R718
TP25
C755
TP32
J720
IC701
16
1
17
32
TP13A
R721
C731
C730
J721
J722
C706
J1
C705
J723
C740
C723
IC702
41
40
60
21
61
20
80
1
C724
R760
C743
TP12
TP11A
C742
R704
R705
C710
C733
C729
R702
TP33
R744
R737
J701
C747
C711
CN701
R753
R706
TP42
C712
C749
R738
R764
X701
R708
R707
C745
TP31
C722
C721
R714
R720
C748
S701
REST.SW
TP2
C713
J715
Q701
C
B
E
J725
J724
TP4
C746
TP24
R723
R715
R731
R735
R754
R736
TP1
M701
TRV MOTOR
R725
C715
C738
R732
C714
TP39
C736
TP37
M702
SPL MOTOR
IC703
28
15
C751
C750
TP7
TP8
TP9
PbF
TP10
TP38
C737
C734
C735
TP36
1
14
J716
TP11B

(SIDE A)

A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9

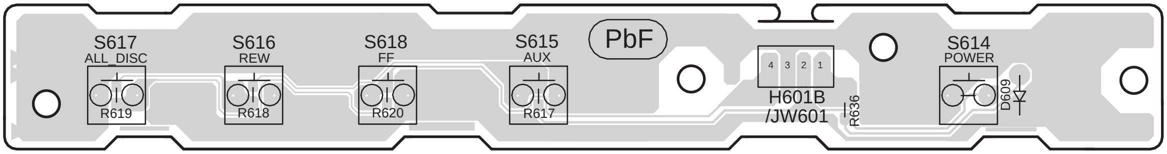
A CD SERVO P.C.B (REPV0010A)


R709
J737
R763
R761
R762
C754
1
13
IC704
C758
26
14
R727
R749
C752
R729
R728
C739
PbF

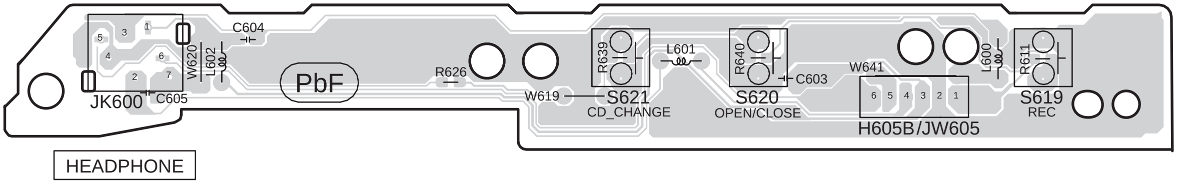
(SIDE B)

A B C D E F G

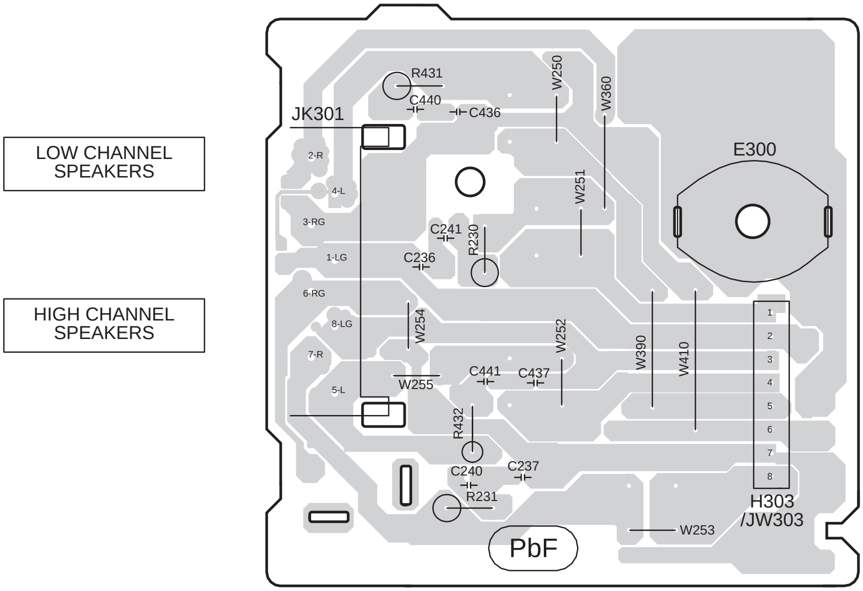
E SWITCH P.C.B (REPV0017A)


S617
ALL_DISC
R619
S616
REW
R618
S618
FF
R620
S615
AUX
R617
PbF
4 3 2 1
H601B
/JW601
R636
S614
POWER
D609

F HEADPHONE P.C.B (REPV0017A)


5 3 1
4 6
2 7
W620
L602
C604
JK600
C605
PbF
R626
W619
R639
S621
CD_CHANGE
L601
R640
S620
OPEN/CLOSE
C603
W641
6 5 4 3 2 1
H605B/JW605
L600
R611
S619
REC
HEADPHONE

L SPEAKER TERMINAL P.C.B (REPV0017A)


LOW CHANNEL SPEAKERS
HIGH CHANNEL SPEAKERS
R431
C440
C436
JK301
W250
W360
2-R
4-L
3-RG
1-LG
6-RG
8-LG
7-R
5-L
E300
W251
C241
R230
C236
W254
W252
W390
W410
1
2
3
4
5
6
7
8
W255
C441
C437
R432
C240
C237
R231
H303
/JW303
W253
PbF

1
2
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4
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6
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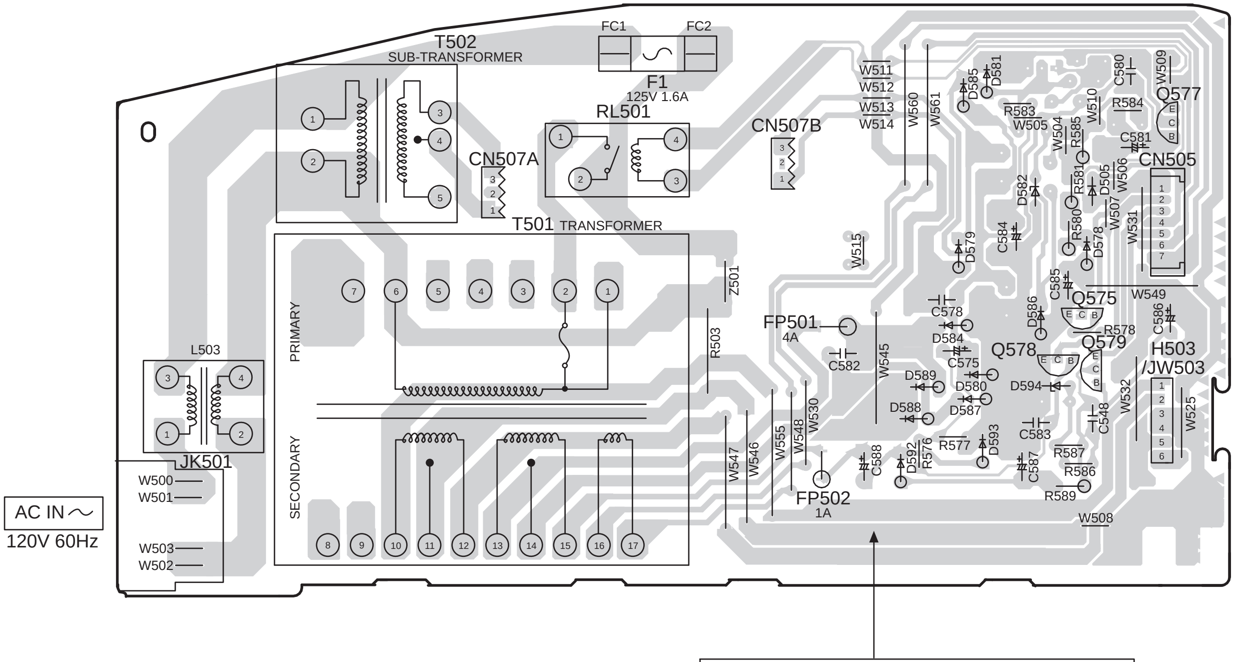
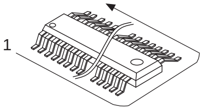
8
9

K TRANSFORMER P.C.B (REPV0018A)

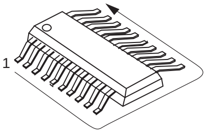

A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
0
T502
SUB-TRANSFORMER
FC1
FC2
F1
125V 1.6A
RL501
CN507A
CN507B
T501 TRANSFORMER
PRIMARY
SECONDARY
L503
JK501
W500
W501
W503
W502
AC IN
120V 60Hz
Z501
R503
FP501
4A
FP502
1A
W511
W512
W513
W514
W560
W561
W515
W545
W547
W546
W555
W548
W530
C582
C578
D584
C575
D589
D580
D588
D587
D579
D585
D581
R583
W505
W504
R585
W510
R584
C580
W509
Q577
C581
CN505
D582
R581
D505
W506
R580
W507
D578
W531
C584
C585
D586
Q575
W549
R578
C586
Q578
Q579
H503
/JW503
D594
W532
C548
W525
C583
R577
D593
C588
D592
R576
C587
R587
R586
R589
W508

CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE. PLEASE DO NOT
TOUCH THIS P.C.B

BA5948FPE2 (28P)
AN7326K (26P)



AN22004A-NF (32P)
C1BB00000757 (24P)
C3EBCG000008 (16P)
C3ABMB000027 (26P)



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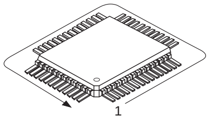

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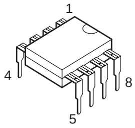

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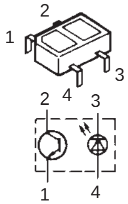

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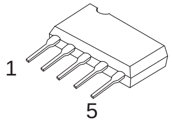

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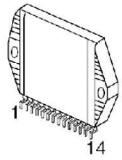

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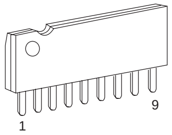

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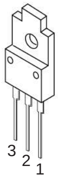

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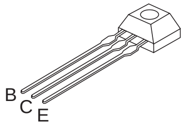
KRC102MTA
KRA110MTA



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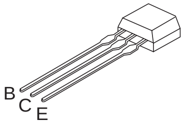

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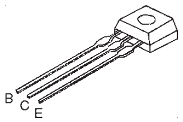
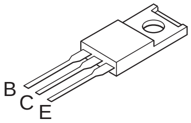


KTA1046
KTC2026



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KRC101STA
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B1GBCFGH0001
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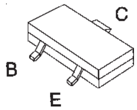
B1ABCF000011



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KTC32030YTA
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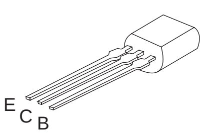

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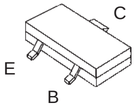

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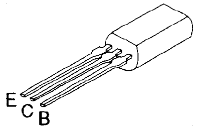

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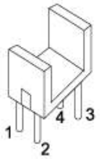

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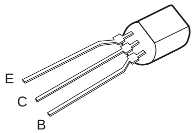
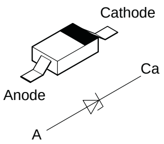


MAZ80560ML


Cathode
Ca
Anode
A

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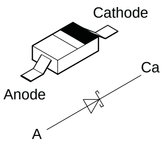
Cathode
Ca
Anode
A

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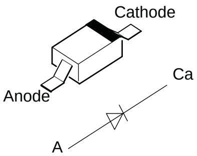
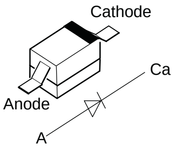

Cathode
Ca
Anode
A

UDZSTE176R8B


Cathode
Ca
Anode
A

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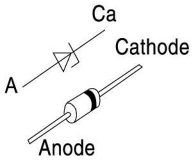
Ca
Cathode
A
Anode

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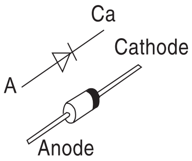
Ca
Cathode
A
Anode

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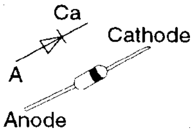
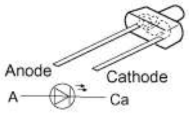
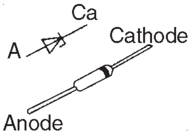
MA729TX
MA2C16500E


Ca
Cathode
A
Anode

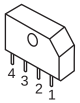
LNJ801TPSJA
SLI325URCT31


Anode
Cathode
A
Ca

B0BA5R600016
B0BA9R600002
B0BA6R600008
B0BA01100004
B0BA8R200005
MTZJ15BTA


Ca
A
Cathode
Anode

B0EBNL000004



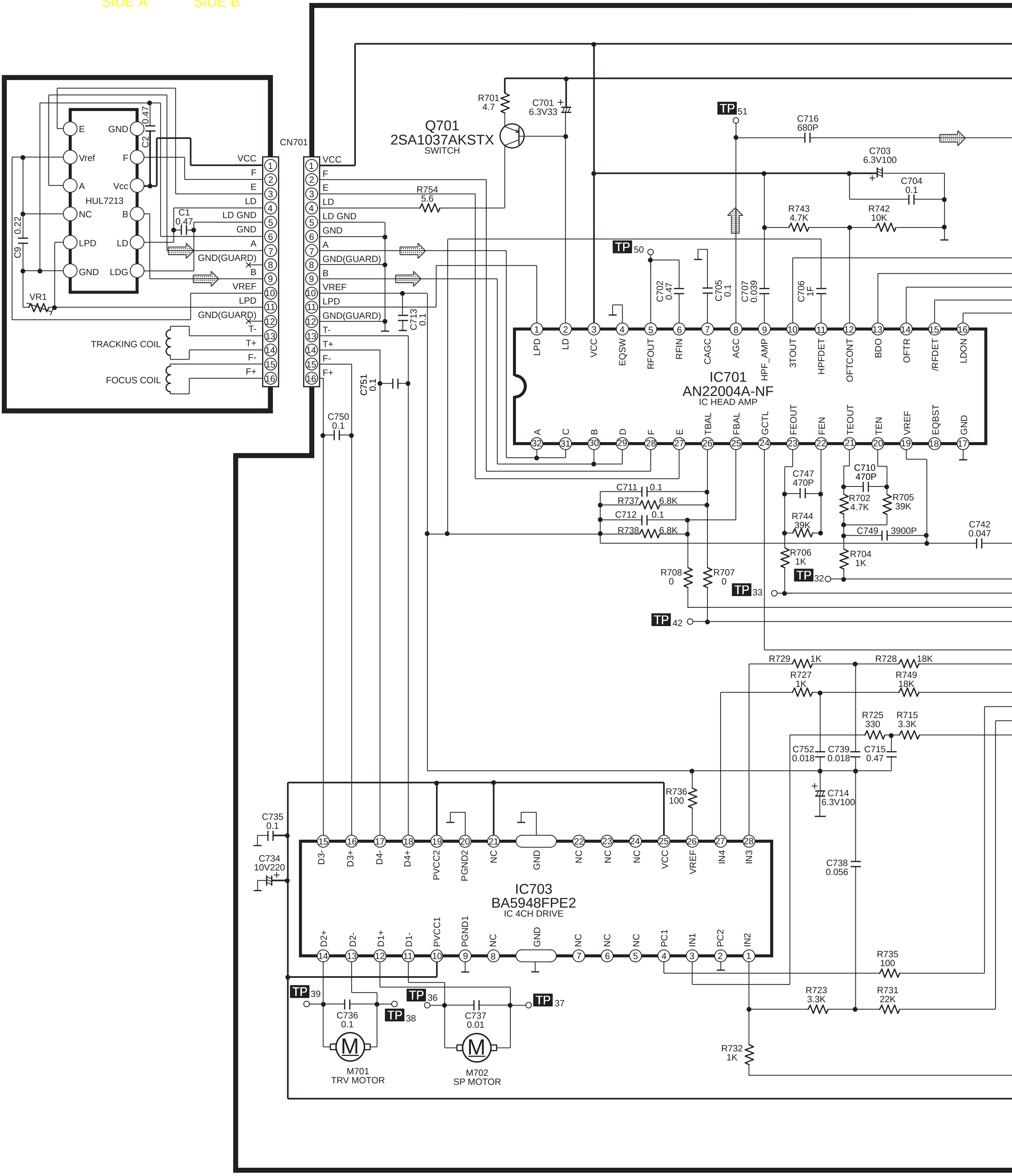
SCHEMATIC DIAGRAM-1

A CD SERVO CIRCUIT

SIDE A SIDE B

: +B SIGNAL LINE

: CD SIGNAL LINE



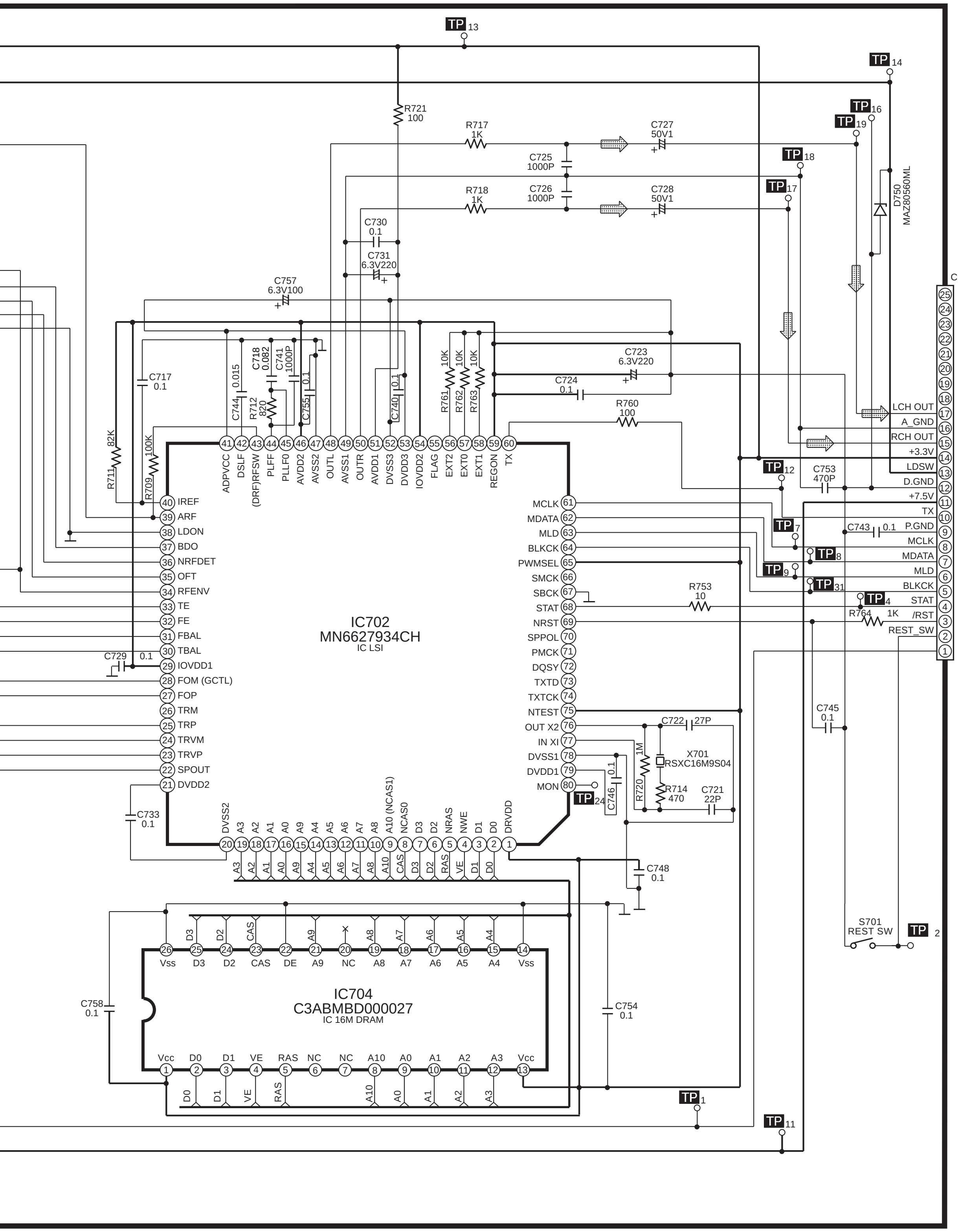
HUL7213
E
GND
Vref
F
A
Vcc
NC
B
LPD
LD
GND
LDG
C2 0.47
C1 0.47
C9 0.22
VR1
TRACKING COIL
FOCUS COIL
CN701
VCC
F
E
LD
LD GND
GND
A
GND(GUARD)
B
VREF
LPD
GND(GUARD)
T-
T+
F-
F+
R754 5.6
R701 4.7
C701 6.3V33
Q701
2SA1037AKSTX
SWITCH
TP 51
C716 680P
C703 6.3V100
C704 0.1
R743 4.7K
R742 10K
TP 50
C702 0.47
C705 0.1
C707 0.039
C706 1F
C713 0.1
C751 0.1
C750 0.1
IC701
AN22004A-NF
IC HEAD AMP
LPD
LD
VCC
EQSW
RFOUT
RFIN
CAGC
AGC
HPF_AMP
3TOUT
HPFDET
OFTCONT
BDO
OFTR
/RFDET
LDON
A
C
B
D
F
E
TBAL
FBAL
GCTL
FEOUT
FEN
TEOUT
TEN
VREF
EQBST
GND
C711 0.1
R737 6.8K
C712 0.1
R738 6.8K
C747 470P
C710 470P
R744 39K
R702 4.7K
R705 39K
C749 3900P
C742 0.047
R706 1K
R704 1K
R708 0
R707 0
TP 33
TP 32
TP 42
R729 1K
R728 18K
R727 1K
R749 18K
R725 330
R715 3.3K
C752 0.018
C739 0.018
C715 0.47
R736 100
C714 6.3V100
C738 0.056
C735 0.1
C734 10V220
IC703
BA5948FPE2
IC 4CH DRIVE
D3-
D3+
D4-
D4+
PVCC2
PGND2
NC
GND
NC
NC
NC
VCC
VREF
IN4
IN3
D2+
D2-
D1+
D1-
PVCC1
PGND1
NC
GND
NC
NC
NC
PC1
IN1
PC2
IN2
R735 100
R723 3.3K
R731 22K
R732 1K
TP 39
TP 38
TP 36
TP 37
C736 0.1
C737 0.01
M
M701
TRV MOTOR
M
M702
SP MOTOR

SCHEMATIC DIAGRAM-2

A CD SERVO CIRCUIT

—— : +B SIGNAL LINE

⇨ : CD SIGNAL LINE


TP 13
TP 14
TP 16
TP 19
TP 18
TP 17
TP 12
TP 7
TP 8
TP 9
TP 31
TP 4
TP 24
TP 2
TP 1
TP 11
R721 100
R717 1K
R718 1K
C727 50V1
C728 50V1
C725 1000P
C726 1000P
C730 0.1
C731 6.3V220
C757 6.3V100
C717 0.1
C744 0.015
R712 820
C718 0.082
C741 1000P
C755 0.1
C740 0.1
R761 10K
R762 10K
R763 10K
C723 6.3V220
C724 0.1
R760 100
R711 82K
R709 100K
C729 0.1
C733 0.1
D750 MAZ80560ML
CN702
C753 470P
C743 0.1
R753 10
R764 1K
C745 0.1
C722 27P
X701 RSXC16M9S04
R720 1M
R714 470
C721 22P
C746 0.1
C748 0.1
C754 0.1
C758 0.1
S701 REST SW
IC702
MN6627934CH
IC LSI
41 ADPVCC
42 DSLF
43 (DRF)RFSW
44 PLFF
45 PLLF0
46 AVDD2
47 AVSS2
48 OUTL
49 AVSS1
50 OUTR
51 AVDD1
52 DVSS3
53 DVDD3
54 IOVDD2
55 FLAG
56 EXT2
57 EXT0
58 EXT1
59 REGON
60 TX
40 IREF
39 ARF
38 LDON
37 BDO
36 NRFDET
35 OFT
34 RFENV
33 TE
32 FE
31 FBAL
30 TBAL
29 IOVDD1
28 FOM (GCTL)
27 FOP
26 TRM
25 TRP
24 TRVM
23 TRVP
22 SPOUT
21 DVDD2
61 MCLK
62 MDATA
63 MLD
64 BLKCK
65 PWMSEL
66 SMCK
67 SBCK
68 STAT
69 NRST
70 SPPOL
71 PMCK
72 DQSY
73 TXTD
74 TXTCK
75 NTEST
76 OUT X2
77 IN XI
78 DVSS1
79 DVDD1
80 MON
20 DVSS2
19 A3
18 A2
17 A1
16 A0
15 A9
14 A4
13 A5
12 A6
11 A7
10 A8
9 A10 (NCAS1)
8 NCAS0
7 D3
6 D2
5 NRAS
4 NWE
3 D1
2 D0
1 DRVDD
A3 A2 A1 A0 A9 A4 A5 A6 A7 A8 A10 CAS D3 D2 RAS VE D1 D0
IC704
C3ABMBD000027
IC 16M DRAM
26 Vss
25 D3
24 D2
23 CAS
22 DE
21 A9
20 NC
19 A8
18 A7
17 A6
16 A5
15 A4
14 Vss
1 Vcc
2 D0
3 D1
4 VE
5 RAS
6 NC
7 NC
8 A10
9 A0
10 A1
11 A2
12 A3
13 Vcc
D3 D2 CAS A9 × A8 A7 A6 A5 A4
D0 D1 VE RAS A10 A0 A1 A2 A3
25
24
23
22
21
20
19
18 LCH OUT
17 A_GND
16 RCH OUT
15 +3.3V
14 LDSW
13 D.GND
12 +7.5V
11 TX
10 P.GND
9 MCLK
8 MDATA
7 MLD
6 BLKCK
5 STAT
4 /RST
3 REST_SW
2
1
TO B MAIN CIRCUIT (CN306) ON SCHEMATIC DIAGRAM-6

SCHEMATIC DIAGRAM-3

B MAIN CIRCUIT

—— : +B SIGNAL LINE

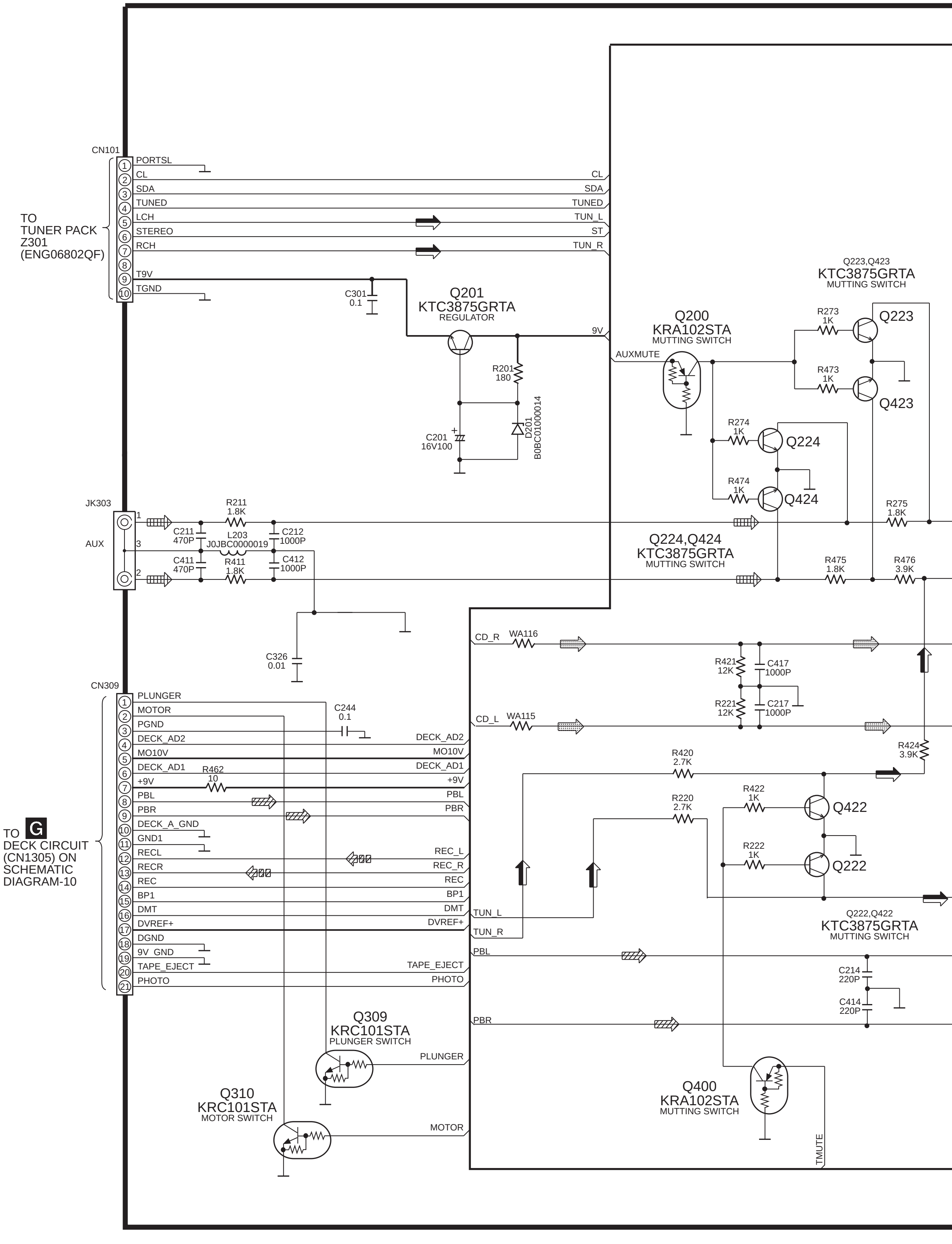
➡ : FM/AM SIGNAL LINE

▨ : TAPE PLAYBACK SIGNAL LINE

▨ : TAPE RECORD SIGNAL LINE

▨ : CD SIGNAL LINE

▨ : AUX SIGNAL LINE



CN101
TO TUNER PACK Z301 (ENG06802QF)
PORTSL
CL
SDA
TUNED
LCH
STEREO
RCH
T9V
TGND
CL
SDA
TUNED
TUN_L
ST
TUN_R
9V
C301 0.1
Q201 KTC3875GRTA REGULATOR
R201 180
C201 16V100
D201 B0BC01000014
Q200 KRA102STA MUTTING SWITCH
AUXMUTE
Q223,Q423 KTC3875GRTA MUTTING SWITCH
R273 1K
Q223
R473 1K
Q423
R274 1K
Q224
R474 1K
Q424
R275 1.8K
Q224,Q424 KTC3875GRTA MUTTING SWITCH
R475 1.8K
R476 3.9K
JK303
AUX
R211 1.8K
C211 470P
L203 J0JBC0000019
C212 1000P
C411 470P
R411 1.8K
C412 1000P
C326 0.01
CD_R
WA116
R421 12K
C417 1000P
R221 12K
C217 1000P
CD_L
WA115
R424 3.9K
R420 2.7K
R220 2.7K
R422 1K
Q422
R222 1K
Q222
Q222,Q422 KTC3875GRTA MUTTING SWITCH
TUN_L
TUN_R
PBL
C214 220P
C414 220P
PBR
Q400 KRA102STA MUTTING SWITCH
TMUTE
CN309
TO G DECK CIRCUIT (CN1305) ON SCHEMATIC DIAGRAM-10
PLUNGER
MOTOR
PGND
DECK_AD2
MO10V
DECK_AD1
+9V
PBL
PBR
DECK_A_GND
GND1
RECL
RECR
REC
BP1
DMT
DVREF+
DGND
9V_GND
TAPE_EJECT
PHOTO
C244 0.1
R462 10
DECK_AD2
MO10V
DECK_AD1
+9V
PBL
PBR
REC_L
REC_R
REC
BP1
DMT
DVREF+
TAPE_EJECT
PHOTO
Q309 KRC101STA PLUNGER SWITCH
PLUNGER
Q310 KRC101STA MOTOR SWITCH
MOTOR

SCHEMATIC DIAGRAM-4

B MAIN CIRCUIT

―― : +B SIGNAL LINE

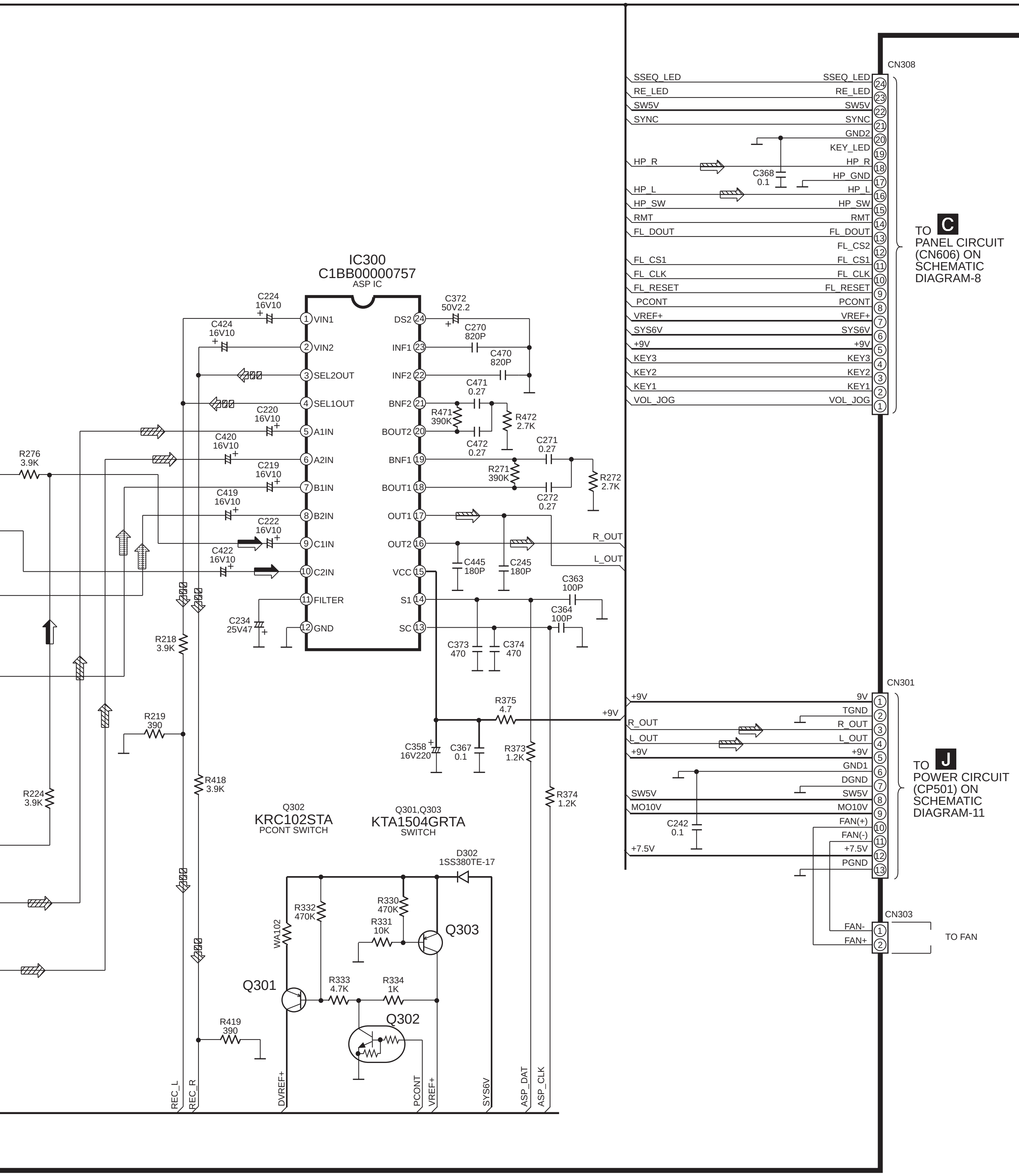
⇨ : MAIN SIGNAL LINE

➡ : FM/AM SIGNAL LINE

▨ : TAPE PLAYBACK SIGNAL LINE

▨ : TAPE RECORD SIGNAL LINE

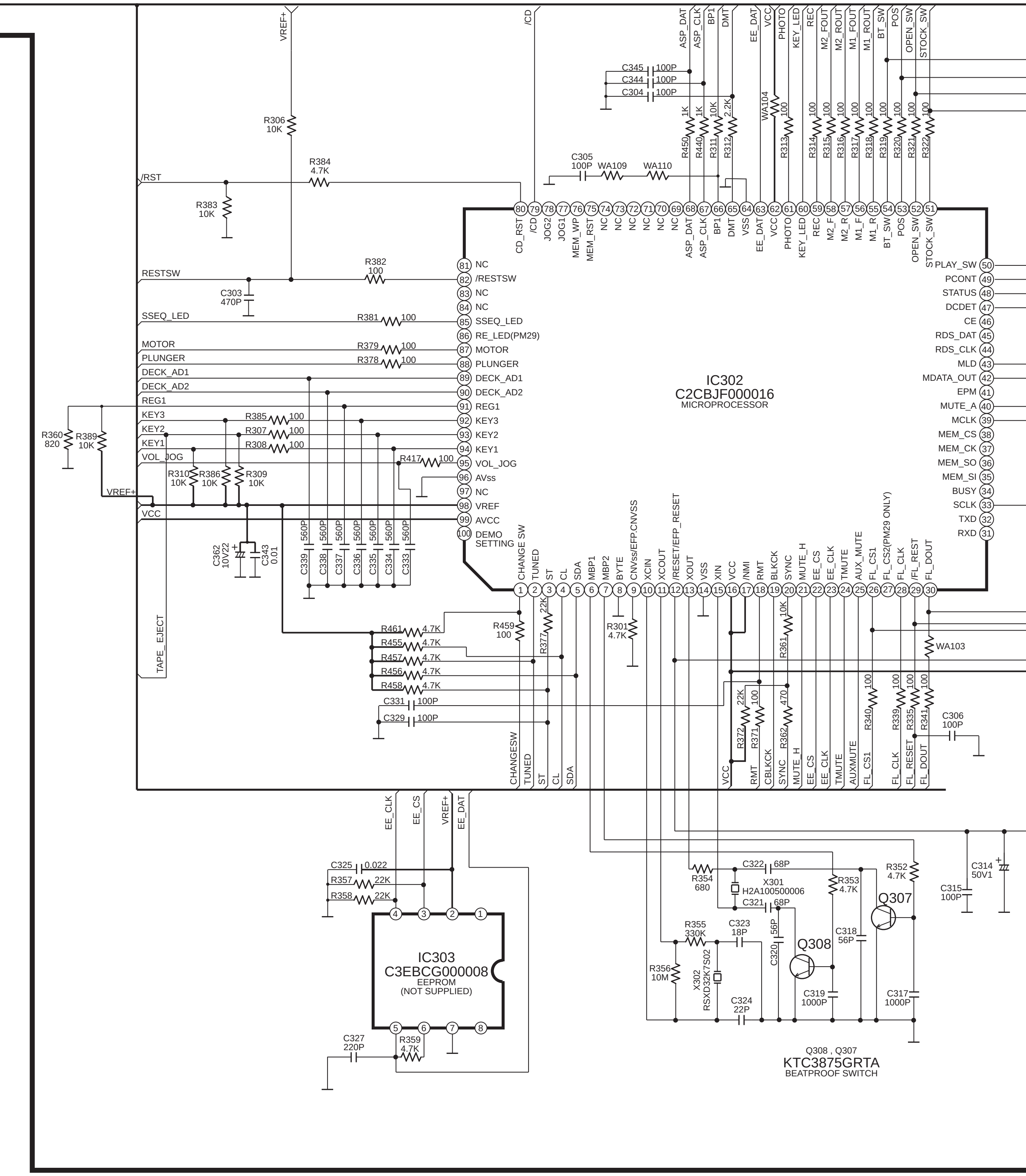
▨ : CD SIGNAL LINE


IC300
C1BB00000757
ASP IC
1 VIN1
2 VIN2
3 SEL2OUT
4 SEL1OUT
5 A1IN
6 A2IN
7 B1IN
8 B2IN
9 C1IN
10 C2IN
11 FILTER
12 GND
DS2 24
INF1 23
INF2 22
BNF2 21
BOUT2 20
BNF1 19
BOUT1 18
OUT1 17
OUT2 16
VCC 15
S1 14
SC 13
C224 16V10
C424 16V10
C220 16V10
C420 16V10
C219 16V10
C419 16V10
C222 16V10
C422 16V10
C234 25V47
C372 50V2.2
C270 820P
C470 820P
C471 0.27
R471 390K
R472 2.7K
C472 0.27
C271 0.27
R271 390K
R272 2.7K
C272 0.27
C445 180P
C245 180P
R_OUT
L_OUT
C363 100P
C364 100P
C373 470
C374 470
R276 3.9K
R218 3.9K
R219 390
R224 3.9K
R418 3.9K
R419 390
R375 4.7
+9V
C358 16V220
C367 0.1
R373 1.2K
R374 1.2K
Q302
KRC102STA
PCONT SWITCH
Q301,Q303
KTA1504GRTA
SWITCH
D302
1SS380TE-17
R332 470K
WA102
R330 470K
R331 10K
Q303
Q301
R333 4.7K
R334 1K
Q302
REC_L
REC_R
DVREF+
PCONT
VREF+
SYS6V
ASP_DAT
ASP_CLK
CN308
SSEQ_LED 24
RE_LED 23
SW5V 22
SYNC 21
GND2 20
KEY_LED 19
HP_R 18
HP_GND 17
HP_L 16
HP_SW 15
RMT 14
FL_DOUT 13
FL_CS2 12
FL_CS1 11
FL_CLK 10
FL_RESET 9
PCONT 8
VREF+ 7
SYS6V 6
+9V 5
KEY3 4
KEY2 3
KEY1 2
VOL_JOG 1
C368 0.1
TO C PANEL CIRCUIT (CN606) ON SCHEMATIC DIAGRAM-8
CN301
9V 1
TGND 2
R_OUT 3
L_OUT 4
+9V 5
GND1 6
DGND 7
SW5V 8
MO10V 9
FAN(+) 10
FAN(-) 11
+7.5V 12
PGND 13
+9V
R_OUT
L_OUT
+9V
SW5V
MO10V
+7.5V
C242 0.1
TO J POWER CIRCUIT (CP501) ON SCHEMATIC DIAGRAM-11
CN303
FAN- 1
FAN+ 2
TO FAN

SCHEMATIC DIAGRAM-5

B MAIN CIRCUIT

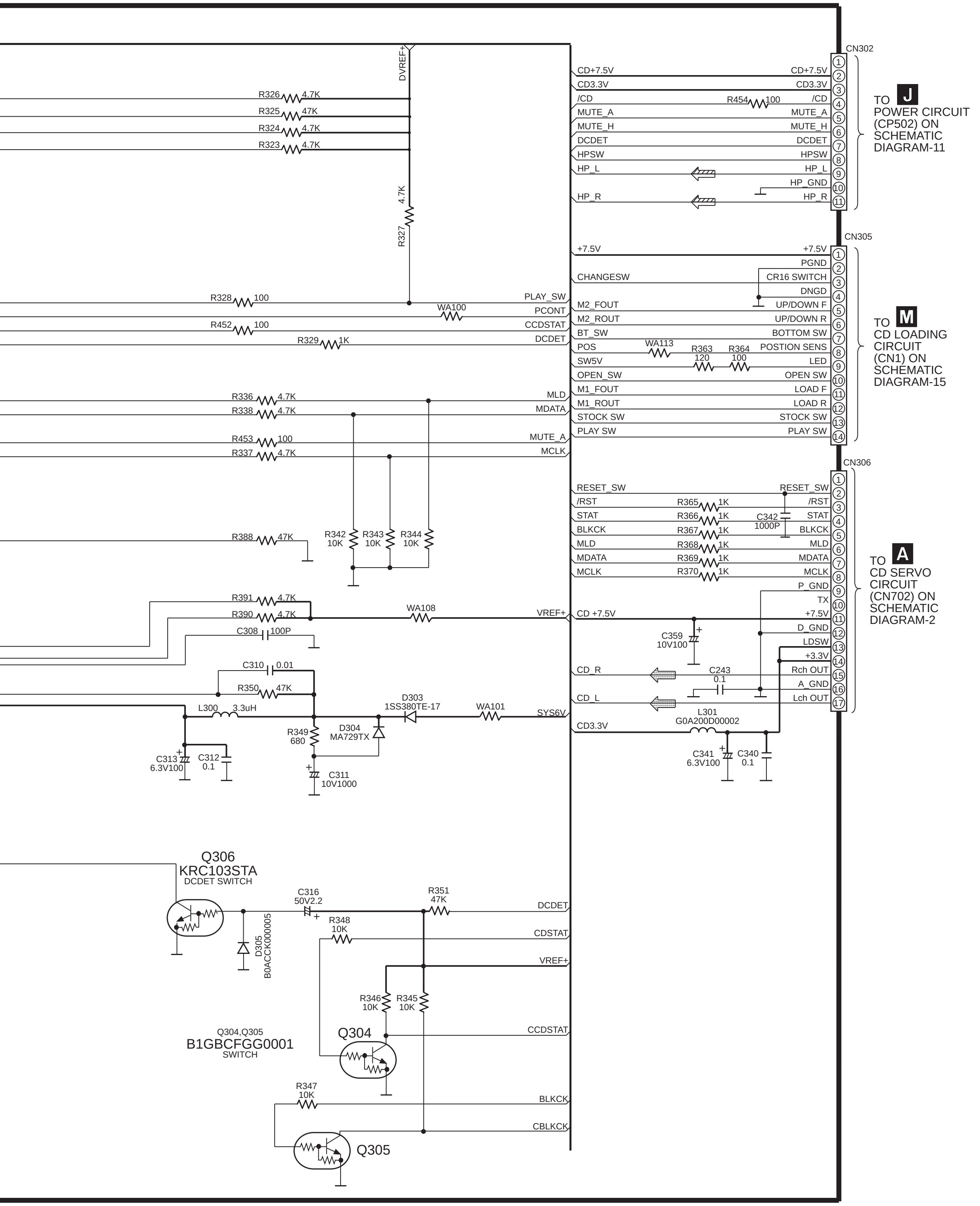
: +B SIGNAL LINE


IC302
C2CBJF000016
MICROPROCESSOR
IC303
C3EBCG000008
EEPROM
(NOT SUPPLIED)
Q308 , Q307
KTC3875GRTA
BEATPROOF SWITCH
Q307
Q308
X301
H2A100500006
X302
RSXD32K7S02
80 CD_RST
79 /CD
78 JOG2
77 JOG1
76 MEM_WP
75 MEM_RST
74 NC
73 NC
72 NC
71 NC
70 NC
69 NC
68 ASP_DAT
67 ASP_CLK
66 BP1
65 DMT
64 VSS
63 EE_DAT
62 VCC
61 PHOTO
60 KEY_LED
59 REC
58 M2_F
57 M2_R
56 M1_F
55 M1_R
54 BT_SW
53 POS
52 OPEN_SW
51 STOCK_SW
81 NC
82 /RESTSW
83 NC
84 NC
85 SSEQ_LED
86 RE_LED(PM29)
87 MOTOR
88 PLUNGER
89 DECK_AD1
90 DECK_AD2
91 REG1
92 KEY3
93 KEY2
94 KEY1
95 VOL_JOG
96 AVss
97 NC
98 VREF
99 AVCC
100 DEMO SETTING
50 PLAY_SW
49 PCONT
48 STATUS
47 DCDET
46 CE
45 RDS_DAT
44 RDS_CLK
43 MLD
42 MDATA_OUT
41 EPM
40 MUTE_A
39 MCLK
38 MEM_CS
37 MEM_CK
36 MEM_SO
35 MEM_SI
34 BUSY
33 SCLK
32 TXD
31 RXD
1 CHANGE SW
2 TUNED
3 ST
4 CL
5 SDA
6 MBP1
7 MBP2
8 BYTE
9 CNVss/EFP.CNVSS
10 XCIN
11 XCOUT
12 /RESET/EFP_RESET
13 XOUT
14 VSS
15 XIN
16 VCC
17 /NMI
18 RMT
19 BLKCK
20 SYNC
21 MUTE_H
22 EE_CS
23 EE_CLK
24 TMUTE
25 AUX_MUTE
26 FL_CS1
27 FL_CS2(PM29 ONLY)
28 FL_CLK
29 /FL_REST
30 FL_DOUT
/CD
VREF+
ASP_DAT
ASP_CLK
BP1
DMT
EE_DAT
VCC
PHOTO
KEY_LED
REC
M2_FOUT
M2_ROUT
M1_FOUT
M1_ROUT
BT_SW
POS
OPEN_SW
STOCK_SW
C345 100P
C344 100P
C304 100P
R450 1K
R440 1K
R311 10K
R312 2.2K
WA104
R313 100
R314 100
R315 100
R316 100
R317 100
R318 100
R319 100
R320 100
R321 100
R322 100
C305 100P
WA109
WA110
R306 10K
R384 4.7K
/RST
R383 10K
R382 100
RESTSW
C303 470P
SSEQ_LED
R381 100
MOTOR
R379 100
PLUNGER
R378 100
DECK_AD1
DECK_AD2
REG1
KEY3
R385 100
KEY2
R307 100
KEY1
R308 100
VOL_JOG
R417 100
R360 820
R389 10K
R310 10K
R386 10K
R309 10K
VREF+
VCC
C362 10V22
C343 0.01
C339 560P
C338 560P
C337 560P
C336 560P
C335 560P
C334 560P
C333 560P
TAPE_EJECT
R461 4.7K
R455 4.7K
R457 4.7K
R456 4.7K
R458 4.7K
C331 100P
C329 100P
R459 100
R377 22K
R301 4.7K
R361 10K
WA103
R372 22K
R371 100
R362 470
R340 100
R339 100
R335 100
R341 100
C306 100P
CHANGESW
TUNED
ST
CL
SDA
VCC
RMT
CBLKCK
SYNC
MUTE_H
EE_CS
EE_CLK
TMUTE
AUXMUTE
FL_CS1
FL_CLK
FL_RESET
FL_DOUT
EE_CLK
EE_CS
VREF+
EE_DAT
C325 0.022
R357 22K
R358 22K
C327 220P
R359 4.7K
C322 68P
R354 680
C321 68P
R353 4.7K
R352 4.7K
C314 50V1
C315 100P
R355 330K
C323 18P
C320 56P
C318 56P
R356 10M
C324 22P
C319 1000P
C317 1000P

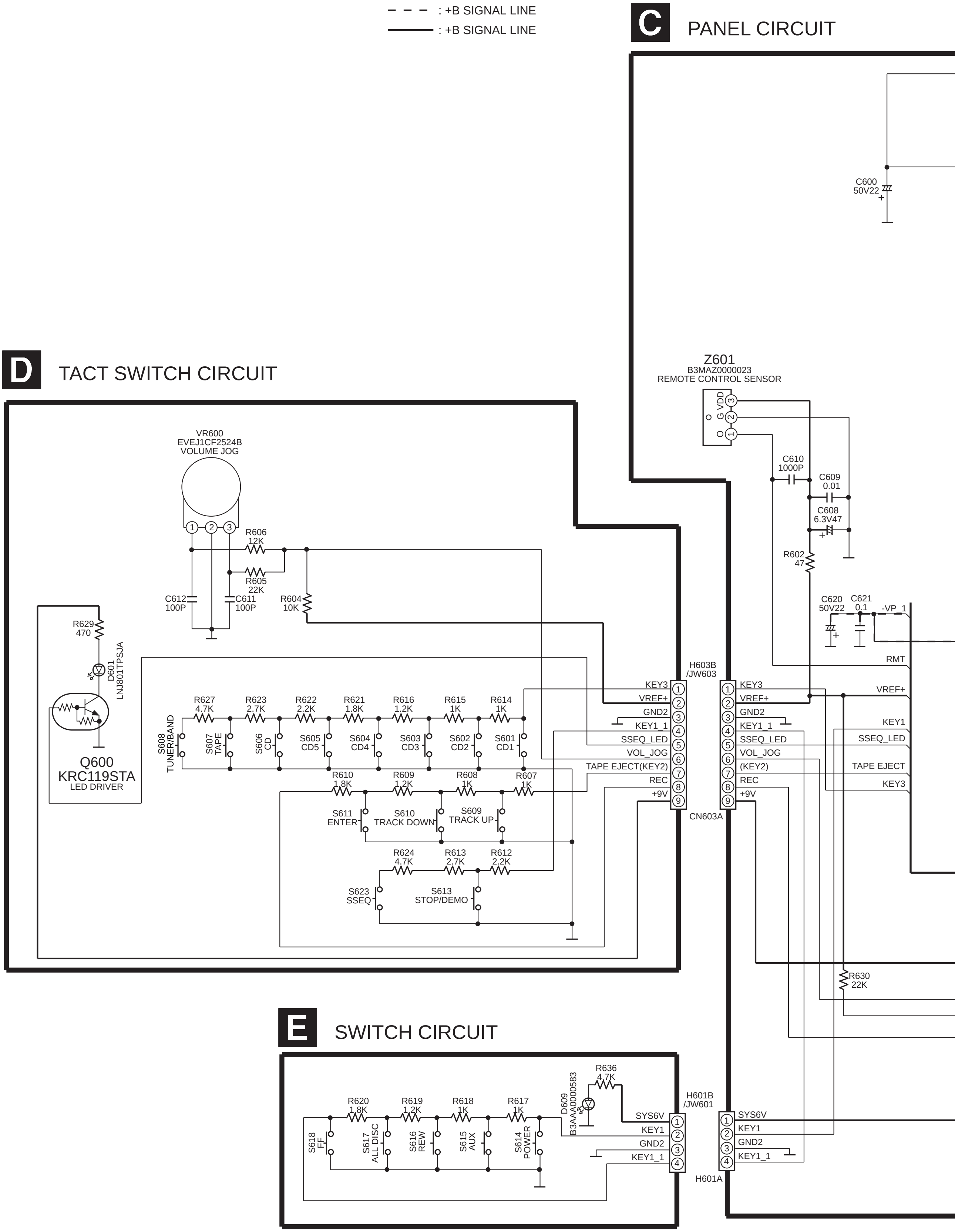
SCHEMATIC DIAGRAM-6

B MAIN CIRCUIT

⇨ : MAIN SIGNAL LINE
▨ : CD SIGNAL LINE
―― : +B SIGNAL LINE


DVREF+
R326 4.7K
R325 47K
R324 4.7K
R323 4.7K
R327 4.7K
R328 100
WA100
R452 100
R329 1K
PLAY_SW
PCONT
CCDSTAT
DCDET
R336 4.7K
R338 4.7K
R453 100
R337 4.7K
MLD
MDATA
MUTE_A
MCLK
R388 47K
R342 10K
R343 10K
R344 10K
R391 4.7K
R390 4.7K
WA108
VREF+
C308 100P
C310 0.01
R350 47K
L300 3.3uH
D303 1SS380TE-17
WA101
SYS6V
R349 680
D304 MA729TX
C313 6.3V100
C312 0.1
C311 10V1000
CN302
CD+7.5V
CD3.3V
/CD
R454 100
MUTE_A
MUTE_H
DCDET
HPSW
HP_L
HP_GND
HP_R
TO J POWER CIRCUIT (CP502) ON SCHEMATIC DIAGRAM-11
CN305
+7.5V
PGND
CHANGESW
CR16 SWITCH
DNGD
M2_FOUT
UP/DOWN F
M2_ROUT
UP/DOWN R
BT_SW
BOTTOM SW
POS
WA113
R363 120
R364 100
POSTION SENS
SW5V
LED
OPEN_SW
OPEN SW
M1_FOUT
LOAD F
M1_ROUT
LOAD R
STOCK SW
PLAY SW
TO M CD LOADING CIRCUIT (CN1) ON SCHEMATIC DIAGRAM-15
CN306
RESET_SW
/RST
R365 1K
STAT
R366 1K
C342 1000P
BLKCK
R367 1K
MLD
R368 1K
MDATA
R369 1K
MCLK
R370 1K
P_GND
TX
CD +7.5V
+7.5V
C359 10V100
D_GND
LDSW
+3.3V
CD_R
C243 0.1
Rch OUT
A_GND
CD_L
Lch OUT
CD3.3V
L301 G0A200D00002
C341 6.3V100
C340 0.1
TO A CD SERVO CIRCUIT (CN702) ON SCHEMATIC DIAGRAM-2
Q306 KRC103STA DCDET SWITCH
C316 50V2.2
R351 47K
DCDET
R348 10K
CDSTAT
D305 B0ACCK000005
VREF+
R346 10K
R345 10K
Q304,Q305 B1GBCFGG0001 SWITCH
Q304
CCDSTAT
R347 10K
BLKCK
CBLKCK
Q305

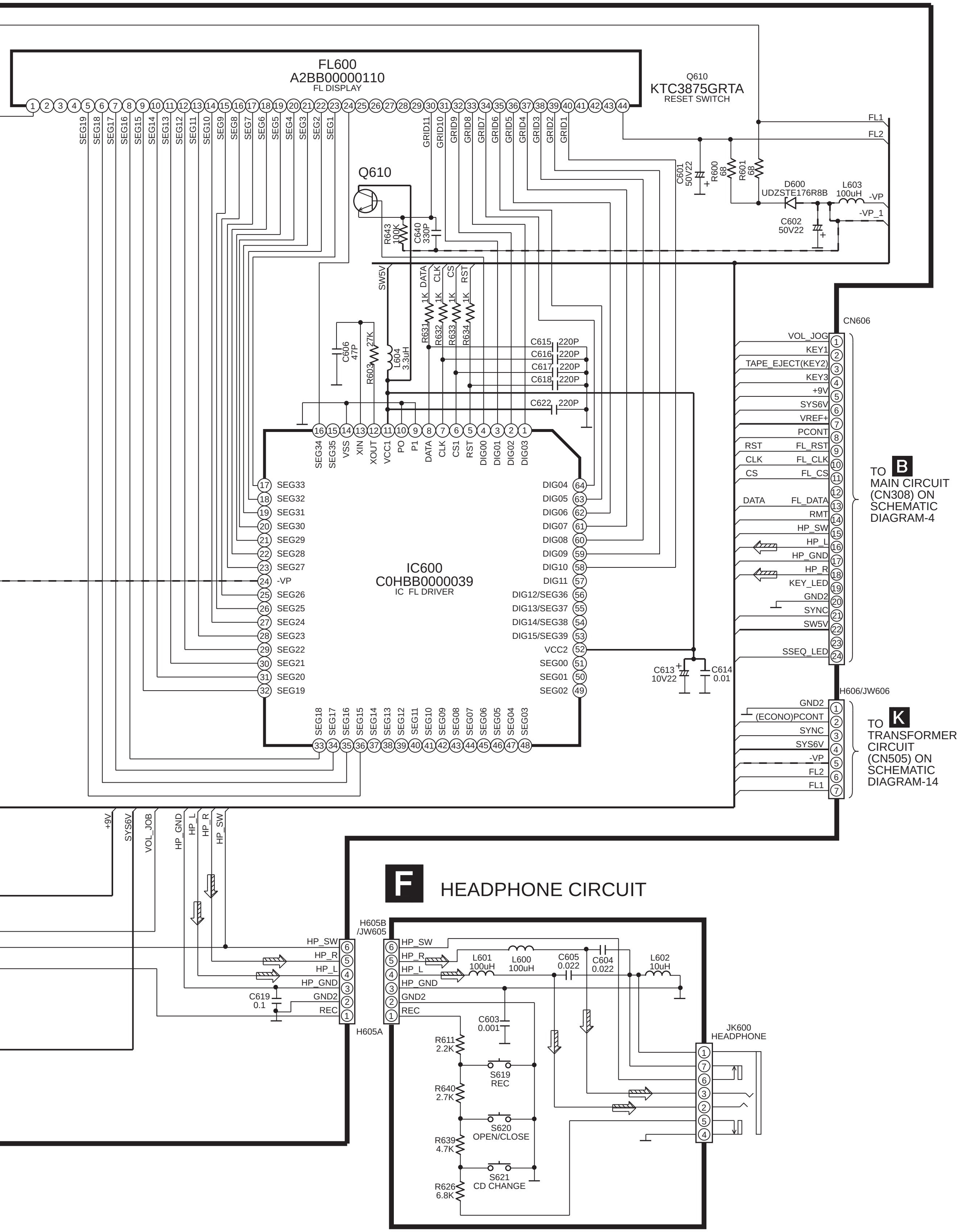
SCHEMATIC DIAGRAM-7


: +B SIGNAL LINE
: +B SIGNAL LINE
C
PANEL CIRCUIT
C600
50V22
Z601
B3MAZ0000023
REMOTE CONTROL SENSOR
VDD
G
O
O
C610
1000P
C609
0.01
C608
6.3V47
R602
47
C620
50V22
C621
0.1
-VP_1
RMT
VREF+
KEY1
SSEQ_LED
TAPE EJECT
KEY3
D
TACT SWITCH CIRCUIT
VR600
EVEJ1CF2524B
VOLUME JOG
R606
12K
R605
22K
C612
100P
C611
100P
R604
10K
R629
470
D601
LNJ801TPSJA
Q600
KRC119STA
LED DRIVER
R627
4.7K
R623
2.7K
R622
2.2K
R621
1.8K
R616
1.2K
R615
1K
R614
1K
S608
TUNER/BAND
S607
TAPE
S606
CD
S605
CD5
S604
CD4
S603
CD3
S602
CD2
S601
CD1
R610
1.8K
R609
1.2K
R608
1K
R607
1K
S611
ENTER
S610
TRACK DOWN
S609
TRACK UP
R624
4.7K
R613
2.7K
R612
2.2K
S623
SSEQ
S613
STOP/DEMO
H603B
/JW603
KEY3
VREF+
GND2
KEY1_1
SSEQ_LED
VOL_JOG
TAPE EJECT(KEY2)
REC
+9V
CN603A
KEY3
VREF+
GND2
KEY1_1
SSEQ_LED
VOL_JOG
(KEY2)
REC
+9V
R630
22K
E
SWITCH CIRCUIT
R636
4.7K
D609
B3AAA0000583
R620
1.8K
R619
1.2K
R618
1K
R617
1K
S618
FF
S617
ALL DISC
S616
REW
S615
AUX
S614
POWER
H601B
/JW601
SYS6V
KEY1
GND2
KEY1_1
H601A
SYS6V
KEY1
GND2
KEY1_1

SCHEMATIC DIAGRAM-8

C PANEL CIRCUIT

- - - - : +B SIGNAL LINE
——— : +B SIGNAL LINE
⇨ : MAIN SIGNAL LINE


FL600
A2BB00000110
FL DISPLAY
Q610
KTC3875GRTA
RESET SWITCH
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44
SEG19 SEG18 SEG17 SEG16 SEG15 SEG14 SEG13 SEG12 SEG11 SEG10 SEG9 SEG8 SEG7 SEG6 SEG5 SEG4 SEG3 SEG2 SEG1
GRID11 GRID10 GRID9 GRID8 GRID7 GRID6 GRID5 GRID4 GRID3 GRID2 GRID1
FL1
FL2
C601 50V22
R600 68
R601 68
D600 UDZSTE176R8B
L603 100uH
-VP
-VP_1
C602 50V22
Q610
R643 100K
C640 330P
SW5V
DATA CLK CS RST
R631 1K
R632 1K
R633 1K
R634 1K
C606 47P
R603 27K
L604 3.3uH
C615 220P
C616 220P
C617 220P
C618 220P
C622 220P
SEG34 SEG35 VSS XIN XOUT VCC1 PO P1 DATA CLK CS1 RST DIG00 DIG01 DIG02 DIG03
IC600
C0HBB0000039
IC FL DRIVER
SEG33 SEG32 SEG31 SEG30 SEG29 SEG28 SEG27 -VP SEG26 SEG25 SEG24 SEG23 SEG22 SEG21 SEG19
DIG04 DIG05 DIG06 DIG07 DIG08 DIG09 DIG10 DIG11 DIG12/SEG36 DIG13/SEG37 DIG14/SEG38 DIG15/SEG39 VCC2 SEG00 SEG01 SEG02
SEG18 SEG17 SEG16 SEG15 SEG14 SEG13 SEG12 SEG11 SEG10 SEG09 SEG08 SEG07 SEG06 SEG05 SEG04 SEG03
C613 10V22
C614 0.01
CN606
VOL_JOG KEY1 TAPE_EJECT(KEY2) KEY3 +9V SYS6V VREF+ PCONT FL_RST FL_CLK FL_CS FL_DATA RMT HP_SW HP_L HP_GND HP_R KEY_LED GND2 SYNC SW5V SSEQ_LED
RST CLK CS DATA
TO B MAIN CIRCUIT (CN308) ON SCHEMATIC DIAGRAM-4
H606/JW606
GND2 (ECONO)PCONT SYNC SYS6V -VP FL2 FL1
TO K TRANSFORMER CIRCUIT (CN505) ON SCHEMATIC DIAGRAM-14
+9V SYS6V VOL_JOB HP_GND HP_L HP_R HP_SW
F HEADPHONE CIRCUIT
H605B /JW605
H605A
HP_SW HP_R HP_L HP_GND GND2 REC
C619 0.1
L601 100uH
L600 100uH
C605 0.022
C604 0.022
L602 10uH
C603 0.001
R611 2.2K
S619 REC
R640 2.7K
S620 OPEN/CLOSE
R639 4.7K
S621 CD CHANGE
R626 6.8K
JK600 HEADPHONE

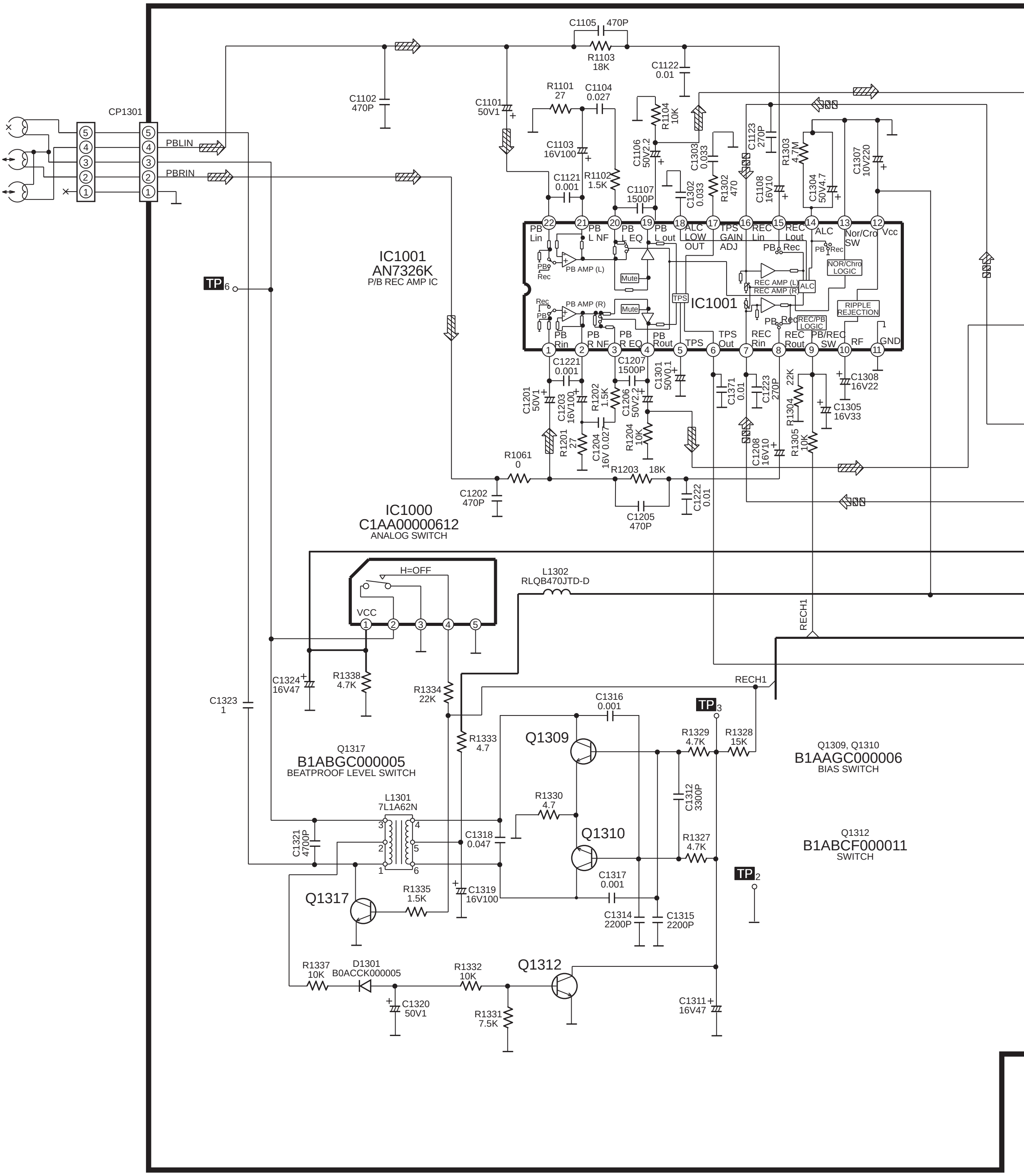
SCHEMATIC DIAGRAM-9

G DECK CIRCUIT

: +B SIGNAL LINE

▨ : TAPE PLAYBACK SIGNAL LINE

▨ : TAPE RECORD SIGNAL LINE


CP1301
PBLIN
PBRIN
5
4
3
2
1
TP6
C1102
470P
C1105 470P
R1103
18K
C1122
0.01
R1101
27
C1104
0.027
C1101
50V1
C1103
16V100
C1121
0.001
R1102
1.5K
C1107
1500P
C1106
50V2.2
R1104
10K
C1302
0.033
C1303
0.033
R1302
470
C1108
16V10
C1123
270P
R1303
4.7M
C1304
50V4.7
C1307
10V220
IC1001
AN7326K
P/B REC AMP IC
PB Lin
PB L NF
PB L EQ
PB L out
ALC LOW OUT
TPS GAIN ADJ
REC Lin
REC Lout
ALC
Nor/Cro SW
Vcc
PB AMP (L)
PB AMP (R)
Mute
TPS
REC AMP (L)
REC AMP (R)
NOR/Chro LOGIC
RIPPLE REJECTION
REC/PB LOGIC
PB Rin
PB R NF
PB R EQ
PB Rout
TPS
TPS Out
REC Rin
REC Rout
PB/REC SW
RF
GND
C1221
0.001
C1201
50V1
C1203
16V100
R1202
1.5K
C1207
1500P
C1206
50V2.2
C1301
50V0.1
C1371
0.01
C1223
270P
R1304
22K
C1308
16V22
C1305
16V33
R1201
27
C1204
16V 0.027
R1204
10K
C1208
16V10
R1305
10K
R1061
0
R1203 18K
C1202
470P
C1205
470P
C1222
0.01
IC1000
C1AA00000612
ANALOG SWITCH
H=OFF
VCC
L1302
RLQB470JTD-D
RECH1
RECH1
C1324
16V47
R1338
4.7K
R1334
22K
C1323
1
C1316
0.001
TP3
R1333
4.7
Q1309
R1329
4.7K
R1328
15K
Q1309, Q1310
B1AAGC000006
BIAS SWITCH
Q1317
B1ABGC000005
BEATPROOF LEVEL SWITCH
L1301
7L1A62N
R1330
4.7
C1312
3300P
Q1310
C1321
4700P
C1318
0.047
R1327
4.7K
Q1312
B1ABCF000011
SWITCH
TP2
Q1317
R1335
1.5K
C1319
16V100
C1317
0.001
C1314
2200P
C1315
2200P
R1337
10K
D1301
B0ACCK000005
R1332
10K
Q1312
C1320
50V1
R1331
7.5K
C1311
16V47

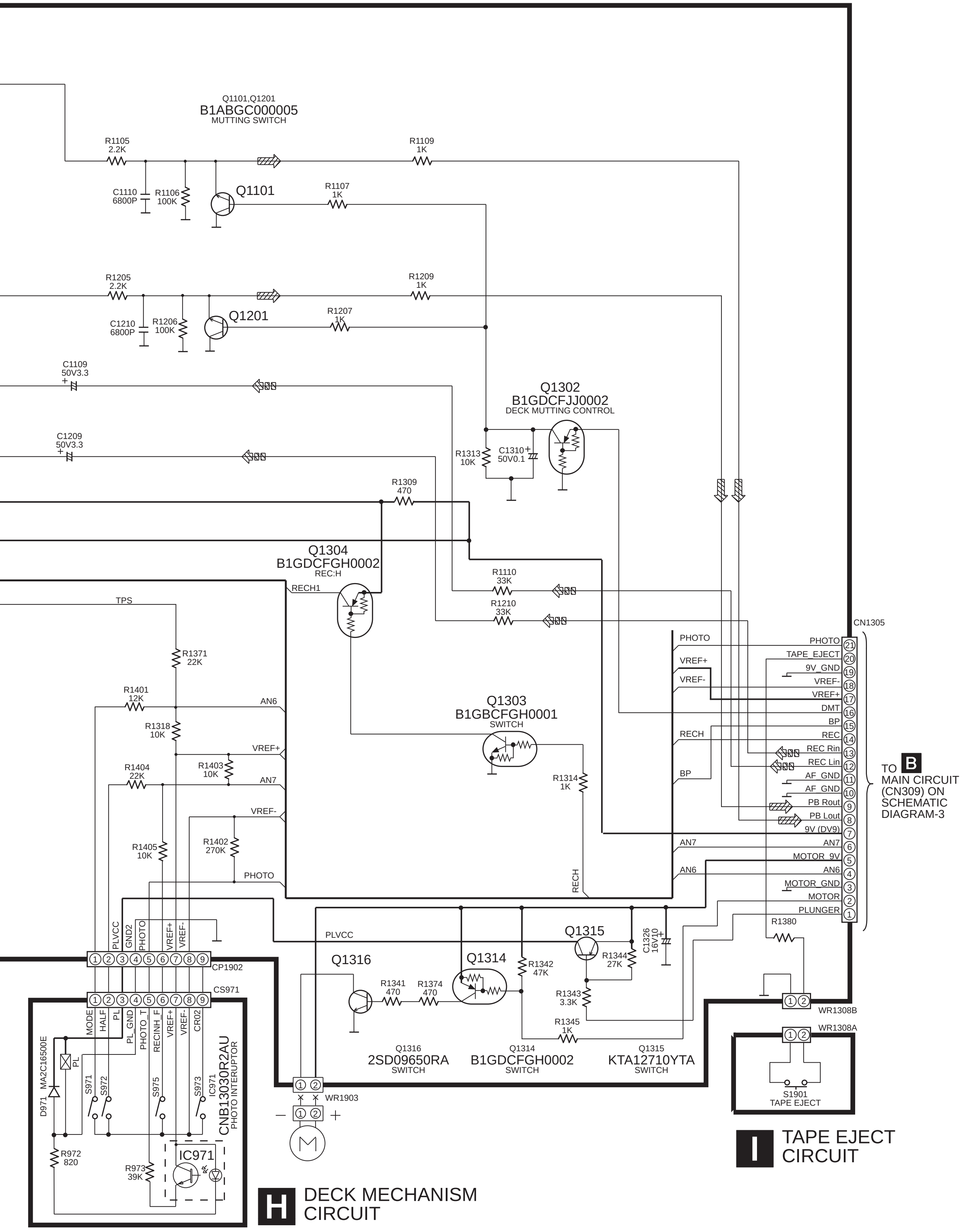
SCHEMATIC DIAGRAM-10

G DECK CIRCUIT

— : +B SIGNAL LINE

▨ : TAPE PLAYBACK SIGNAL LINE

▨ : TAPE RECORD SIGNAL LINE

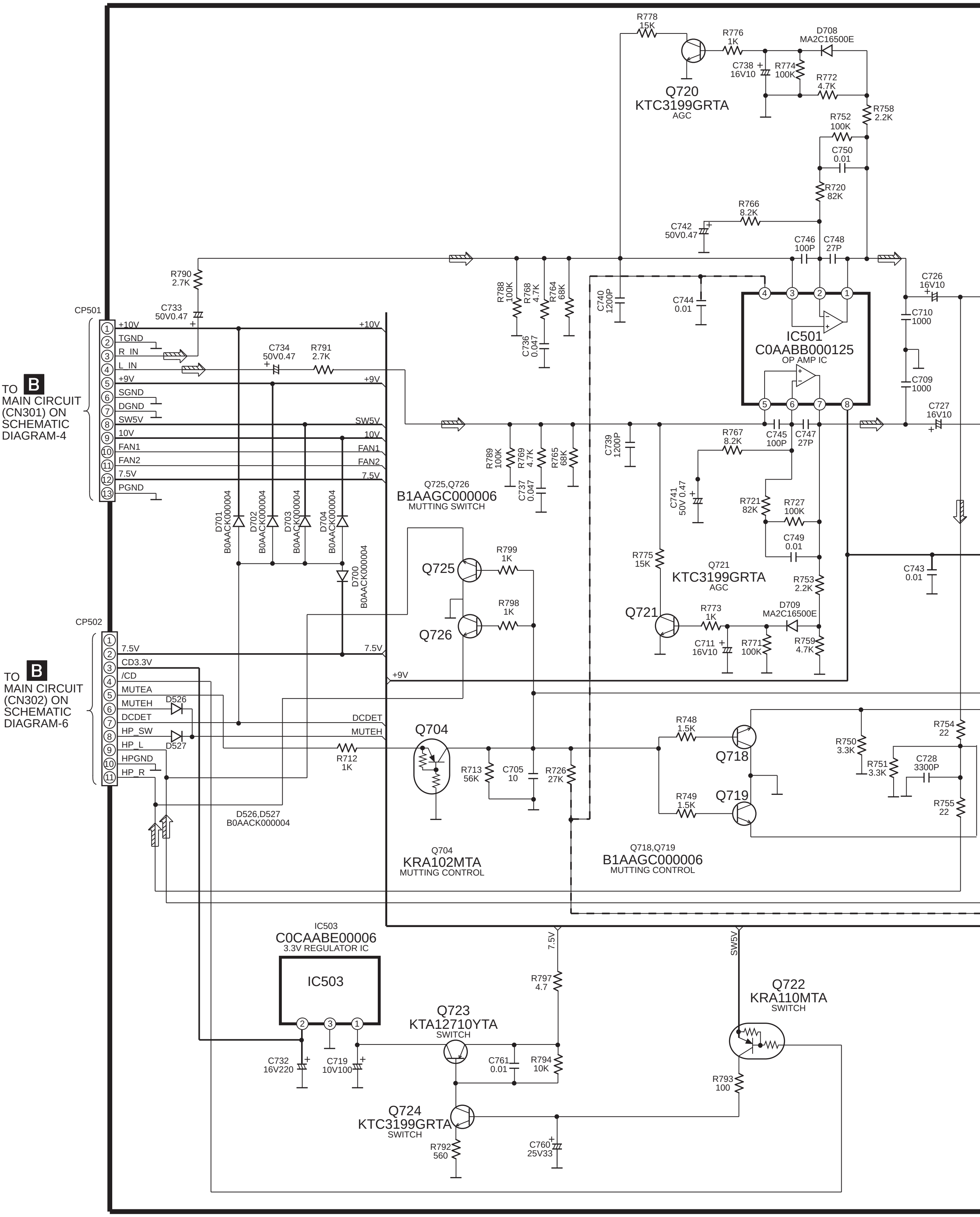


Q1101,Q1201
B1ABGC000005
MUTTING SWITCH
R1105 2.2K
C1110 6800P
R1106 100K
Q1101
R1107 1K
R1109 1K
R1205 2.2K
C1210 6800P
R1206 100K
Q1201
R1207 1K
R1209 1K
C1109 50V3.3
C1209 50V3.3
Q1302
B1GDCFJJ0002
DECK MUTTING CONTROL
R1313 10K
C1310 50V0.1
R1309 470
Q1304
B1GDCFGH0002
REC:H
RECH1
R1110 33K
R1210 33K
TPS
R1371 22K
R1401 12K
AN6
R1318 10K
VREF+
R1403 10K
R1404 22K
AN7
VREF-
R1405 10K
R1402 270K
PHOTO
Q1303
B1GBCFGH0001
SWITCH
R1314 1K
RECH
PHOTO
VREF+
VREF-
RECH
BP
AN7
AN6
CN1305
PHOTO 21
TAPE_EJECT 20
9V_GND 19
VREF- 18
VREF+ 17
DMT 16
BP 15
REC 14
REC Rin 13
REC Lin 12
AF_GND 11
AF_GND 10
PB Rout 9
PB Lout 8
9V (DV9) 7
AN7 6
MOTOR_9V 5
AN6 4
MOTOR_GND 3
MOTOR 2
PLUNGER 1
TO B MAIN CIRCUIT (CN309) ON SCHEMATIC DIAGRAM-3
R1380
PLVCC
GND2
PHOTO
VREF+
VREF-
CP1902
CS971
PLVCC
Q1315
C1326 16V10
Q1316
Q1314
R1342 47K
R1344 27K
R1341 470
R1374 470
R1343 3.3K
R1345 1K
Q1316
2SD09650RA
SWITCH
Q1314
B1GDCFGH0002
SWITCH
Q1315
KTA12710YTA
SWITCH
WR1903
M
WR1308B
WR1308A
S1901
TAPE EJECT
I TAPE EJECT CIRCUIT
MODE
HALF
PL
PL_GND
PHOTO_T
RECINH_F
VREF+
VREF-
CR02
D971 MA2C16500E
PL
S971
S972
S975
S973
IC971
CNB13030R2AU
PHOTO INTERUPTOR
R972 820
R973 39K
IC971
H DECK MECHANISM CIRCUIT

SCHEMATIC DIAGRAM-11

J POWER CIRCUIT

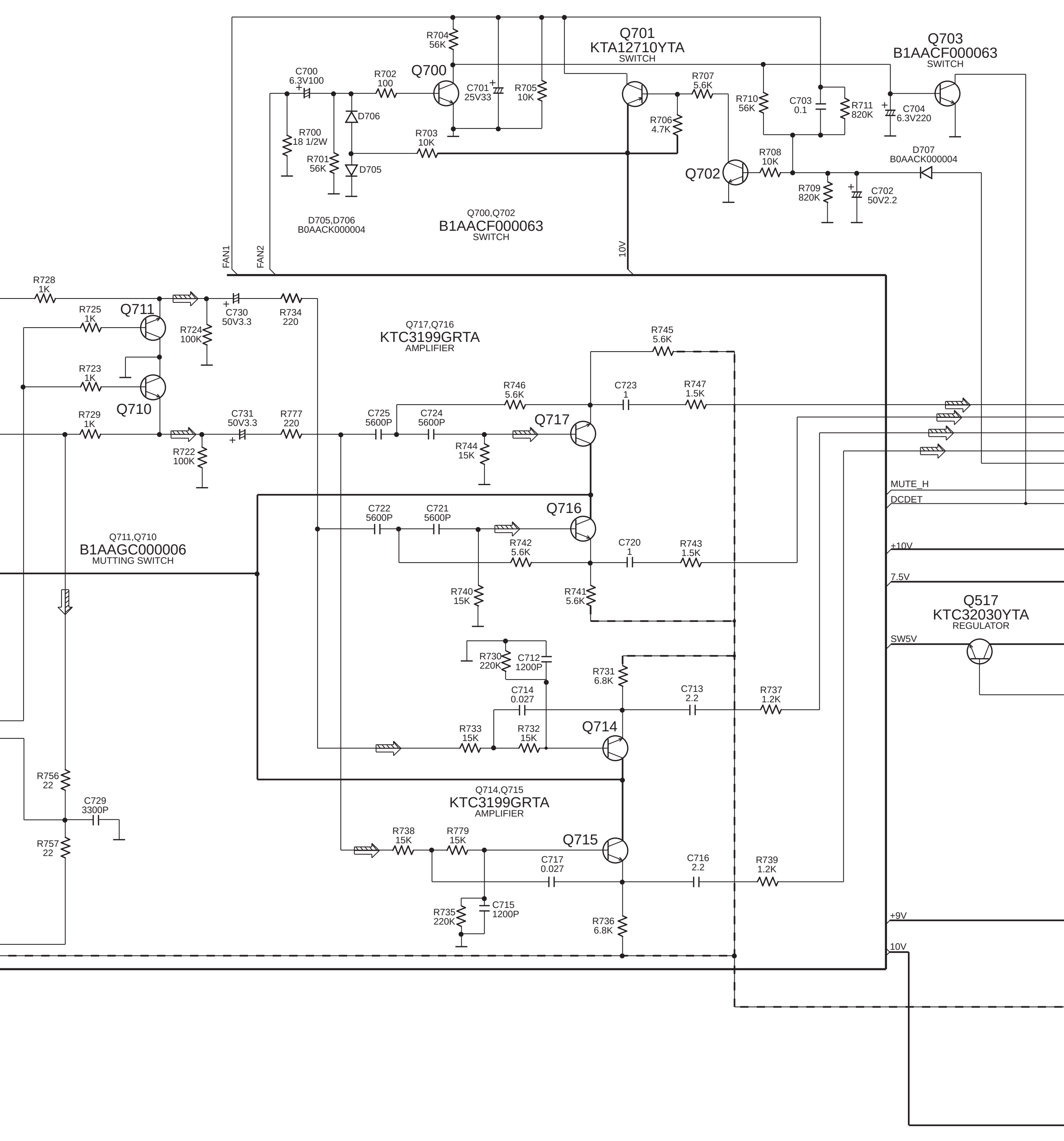
- - - : -B SIGNAL LINE
——— : +B SIGNAL LINE
⇨ : MAIN SIGNAL LINE


R778
15K
Q720
KTC3199GRTA
AGC
R776
1K
C738
16V10
R774
100K
D708
MA2C16500E
R772
4.7K
R758
2.2K
R752
100K
C750
0.01
R720
82K
R766
8.2K
C742
50V0.47
C746
100P
C748
27P
C726
16V10
C710
1000
C709
1000
C727
16V10
IC501
C0AABB000125
OP AMP IC
C744
0.01
C740
1200P
R788
100K
R768
4.7K
R764
68K
C736
0.047
R790
2.7K
C733
50V0.47
CP501
TO B MAIN CIRCUIT (CN301) ON SCHEMATIC DIAGRAM-4
+10V
TGND
R_IN
L_IN
+9V
SGND
DGND
SW5V
10V
FAN1
FAN2
7.5V
PGND
C734
50V0.47
R791
2.7K
+10V
+9V
SW5V
10V
FAN1
FAN2
7.5V
R789
100K
R769
4.7K
R765
68K
C737
0.047
C739
1200P
R767
8.2K
C745
100P
C747
27P
C741
50V 0.47
R721
82K
R727
100K
C749
0.01
R775
15K
Q721
KTC3199GRTA
AGC
R753
2.2K
D709
MA2C16500E
R773
1K
C711
16V10
R771
100K
R759
4.7K
C743
0.01
Q725,Q726
B1AAGC000006
MUTTING SWITCH
D701
B0AACK000004
D702
B0AACK000004
D703
B0AACK000004
D704
B0AACK000004
D700
B0AACK000004
Q725
R799
1K
Q726
R798
1K
CP502
TO B MAIN CIRCUIT (CN302) ON SCHEMATIC DIAGRAM-6
7.5V
CD3.3V
/CD
MUTEA
MUTEH
DCDET
HP_SW
HP_L
HPGND
HP_R
D526
D527
7.5V
+9V
DCDET
MUTEH
R712
1K
Q704
R713
56K
C705
10
R726
27K
D526,D527
B0AACK000004
Q704
KRA102MTA
MUTTING CONTROL
R748
1.5K
Q718
R749
1.5K
Q719
Q718,Q719
B1AAGC000006
MUTTING CONTROL
R750
3.3K
R751
3.3K
C728
3300P
R754
22
R755
22
IC503
C0CAABE00006
3.3V REGULATOR IC
IC503
C732
16V220
C719
10V100
7.5V
R797
4.7
Q723
KTA12710YTA
SWITCH
C761
0.01
R794
10K
Q724
KTC3199GRTA
SWITCH
R792
560
C760
25V33
SW5V
Q722
KRA110MTA
SWITCH
R793
100

SCHEMATIC DIAGRAM-12

J POWER CIRCUIT

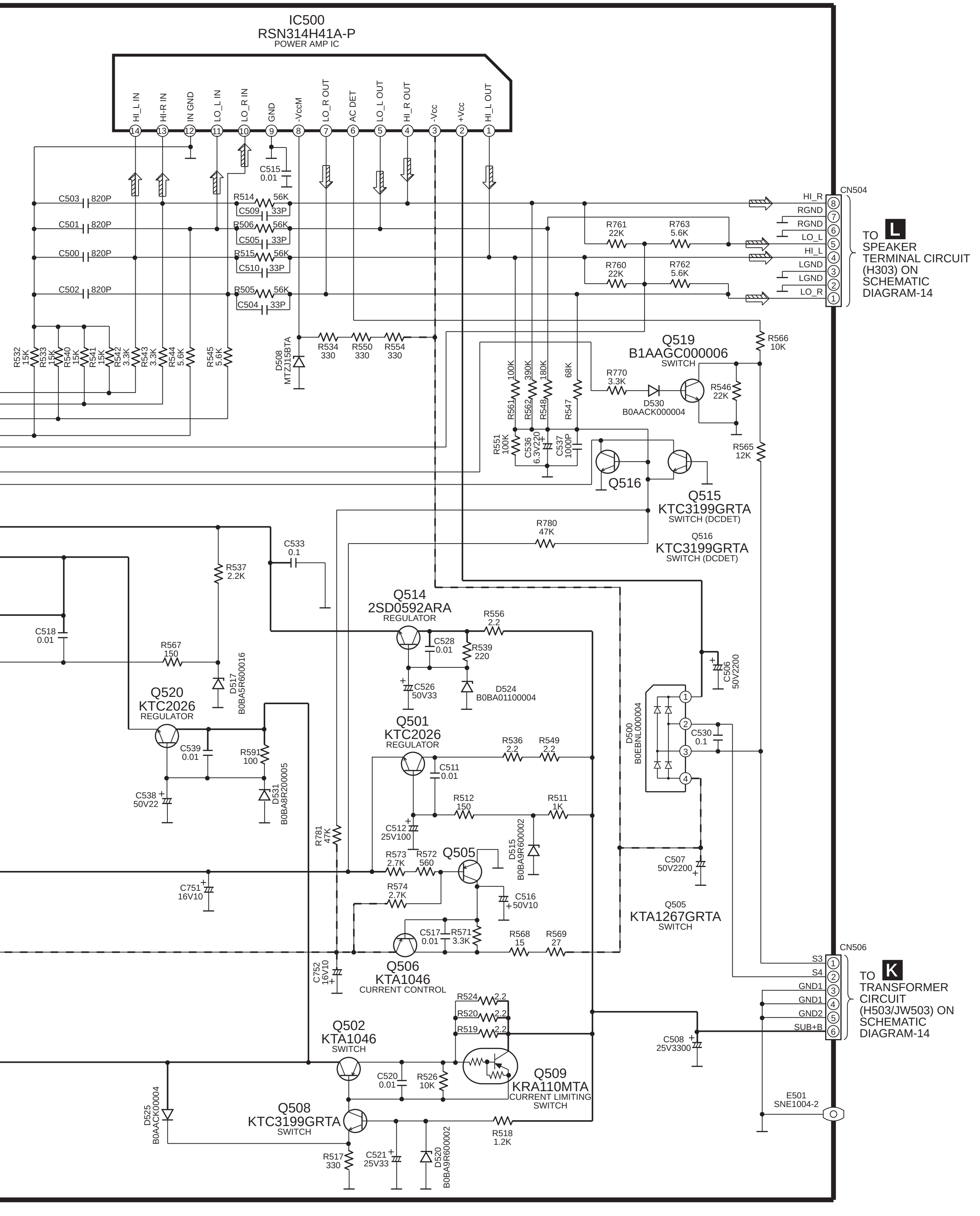
- - - : -B SIGNAL LINE
——— : +B SIGNAL LINE
⇨ : MAIN SIGNAL LINE


Q701
KTA12710YTA
SWITCH
Q703
B1AACF000063
SWITCH
R704
56K
C700
6.3V100
R702
100
Q700
C701
25V33
R705
10K
R707
5.6K
R710
56K
C703
0.1
R711
820K
C704
6.3V220
D706
R700
18 1/2W
R703
10K
R706
4.7K
D707
B0AACK000004
R701
56K
D705
R708
10K
Q702
R709
820K
C702
50V2.2
Q700,Q702
B1AACF000063
SWITCH
D705,D706
B0AACK000004
FAN1
FAN2
10V
R728
1K
C730
50V3.3
R734
220
R725
1K
Q711
R724
100K
Q717,Q716
KTC3199GRTA
AMPLIFIER
R745
5.6K
R723
1K
R746
5.6K
C723
1
R747
1.5K
Q710
R729
1K
C731
50V3.3
R777
220
C725
5600P
C724
5600P
Q717
R744
15K
R722
100K
MUTE_H
DCDET
C722
5600P
C721
5600P
Q716
Q711,Q710
B1AAGC000006
MUTTING SWITCH
R742
5.6K
C720
1
R743
1.5K
+10V
7.5V
R740
15K
R741
5.6K
Q517
KTC32030YTA
REGULATOR
SW5V
R730
220K
C712
1200P
R731
6.8K
C714
0.027
C713
2.2
R737
1.2K
R733
15K
R732
15K
Q714
R756
22
C729
3300P
Q714,Q715
KTC3199GRTA
AMPLIFIER
R757
22
R738
15K
R779
15K
Q715
C717
0.027
C716
2.2
R739
1.2K
C715
1200P
R735
220K
R736
6.8K
+9V
10V

SCHEMATIC DIAGRAM-13

J POWER CIRCUIT

- - - - : -B SIGNAL LINE
——— : +B SIGNAL LINE
⇨ : MAIN SIGNAL LINE


IC500
RSN314H41A-P
POWER AMP IC
HI_L IN
HI-R IN
IN GND
LO_L IN
LO_R IN
GND
-VccM
LO_R OUT
AC DET
LO_L OUT
HI_R OUT
-Vcc
+Vcc
HI_L OUT
⑭ ⑬ ⑫ ⑪ ⑩ ⑨ ⑧ ⑦ ⑥ ⑤ ④ ③ ② ①
C515 0.01
C503 820P
C501 820P
C500 820P
C502 820P
R514 56K
C509 33P
R506 56K
C505 33P
R515 56K
C510 33P
R505 56K
C504 33P
R532 15K
R533 15K
R540 15K
R541 15K
R542 3.3K
R543 3.3K
R544 5.6K
R545 5.6K
D508 MTZJ15BTA
R534 330
R550 330
R554 330
R761 22K
R763 5.6K
R760 22K
R762 5.6K
CN504
HI_R
RGND
RGND
LO_L
HI_L
LGND
LGND
LO_R
⑧ ⑦ ⑥ ⑤ ④ ③ ② ①
TO L SPEAKER TERMINAL CIRCUIT (H303) ON SCHEMATIC DIAGRAM-14
R566 10K
Q519
B1AAGC000006
SWITCH
R770 3.3K
D530 B0AACK000004
R546 22K
R561 100K
R562 390K
R548 180K
R547 68K
R551 100K
C536 6.3V220
C537 1000P
R565 12K
Q516
Q515
KTC3199GRTA
SWITCH (DCDET)
R780 47K
Q516
KTC3199GRTA
SWITCH (DCDET)
C533 0.1
R537 2.2K
C518 0.01
R567 150
D517 B0BA5R600016
Q514
2SD0592ARA
REGULATOR
R556 2.2
C528 0.01
R539 220
C526 50V33
D524 B0BA01100004
C506 50V2200
D500 B0EBNL000004
① ② ③ ④
C530 0.1
Q520
KTC2026
REGULATOR
C539 0.01
R591 100
C538 50V22
D531 B0BA8R200005
Q501
KTC2026
REGULATOR
R536 2.2
R549 2.2
C511 0.01
R512 150
R511 1K
C512 25V100
D515 B0BA9R600002
R781 47K
R573 2.7K
R572 560
Q505
C507 50V2200
C751 16V10
R574 2.7K
C516 50V10
Q505
KTA1267GRTA
SWITCH
C517 0.01
R571 3.3K
R568 15
R569 27
Q506
KTA1046
CURRENT CONTROL
C752 16V10
CN506
S3
S4
GND1
GND1
GND2
SUB+B
① ② ③ ④ ⑤ ⑥
TO K TRANSFORMER CIRCUIT (H503/JW503) ON SCHEMATIC DIAGRAM-14
R524 2.2
R520 2.2
R519 2.2
Q502
KTA1046
SWITCH
C520 0.01
R526 10K
Q509
KRA110MTA
CURRENT LIMITING SWITCH
C508 25V3300
E501 SNE1004-2
D525 B0AACK00004
Q508
KTC3199GRTA
SWITCH
R518 1.2K
R517 330
C521 25V33
D520 B0BA9R600002

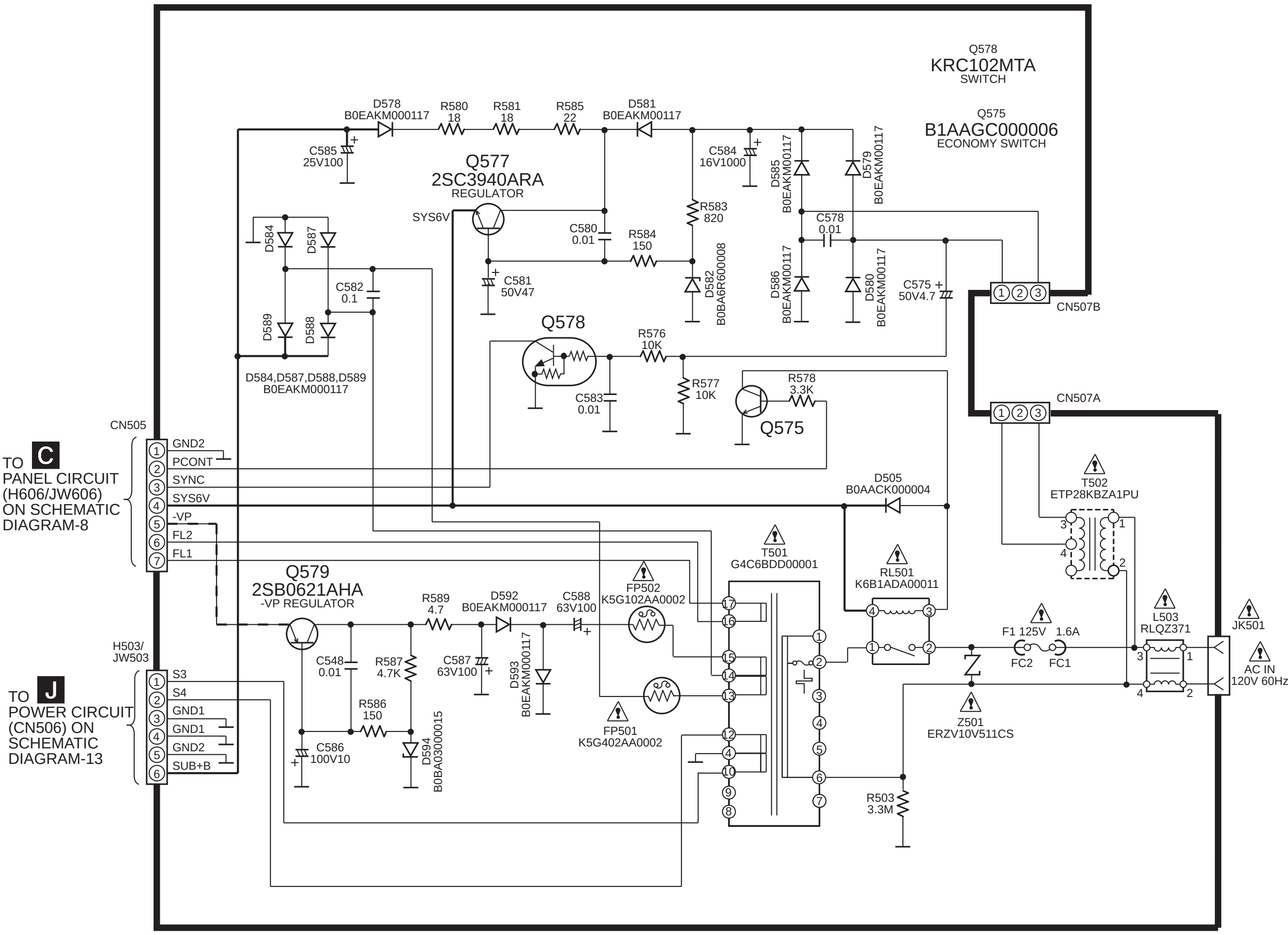
SCHEMATIC DIAGRAM-14

K TRANSFORMER CIRCUIT

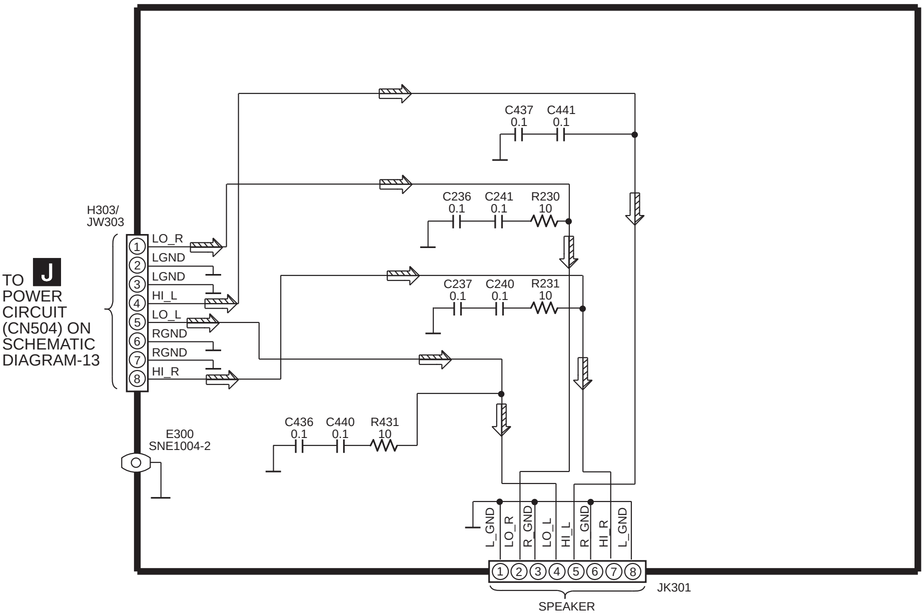
- - - : -B SIGNAL LINE

——— : +B SIGNAL LINE

⇨ : MAIN SIGNAL LINE


Q578
KRC102MTA
SWITCH
Q575
B1AAGC000006
ECONOMY SWITCH
D578
B0EAKM000117
R580
18
R581
18
R585
22
D581
B0EAKM00117
C585
25V100
Q577
2SC3940ARA
REGULATOR
SYS6V
C584
16V1000
D585
B0EAKM00117
D579
B0EAKM00117
R583
820
C580
0.01
R584
150
C578
0.01
C581
50V47
D582
B0BA6R600008
D586
B0EAKM00117
D580
B0EAKM00117
C575
50V4.7
CN507B
D584
D587
C582
0.1
D589
D588
D584,D587,D588,D589
B0EAKM000117
Q578
R576
10K
R577
10K
C583
0.01
R578
3.3K
Q575
CN507A
CN505
TO C
PANEL CIRCUIT
(H606/JW606)
ON SCHEMATIC
DIAGRAM-8
GND2
PCONT
SYNC
SYS6V
-VP
FL2
FL1
D505
B0AACK000004
T502
ETP28KBZA1PU
T501
G4C6BDD00001
RL501
K6B1ADA00011
Q579
2SB0621AHA
-VP REGULATOR
R589
4.7
D592
B0EAKM000117
C588
63V100
FP502
K5G102AA0002
F1 125V 1.6A
FC2
FC1
L503
RLQZ371
JK501
AC IN
120V 60Hz
H503/
JW503
TO J
POWER CIRCUIT
(CN506) ON
SCHEMATIC
DIAGRAM-13
S3
S4
GND1
GND1
GND2
SUB+B
C548
0.01
R587
4.7K
C587
63V100
D593
B0EAKM000117
R586
150
C586
100V10
D594
B0BA03000015
FP501
K5G402AA0002
Z501
ERZV10V511CS
R503
3.3M

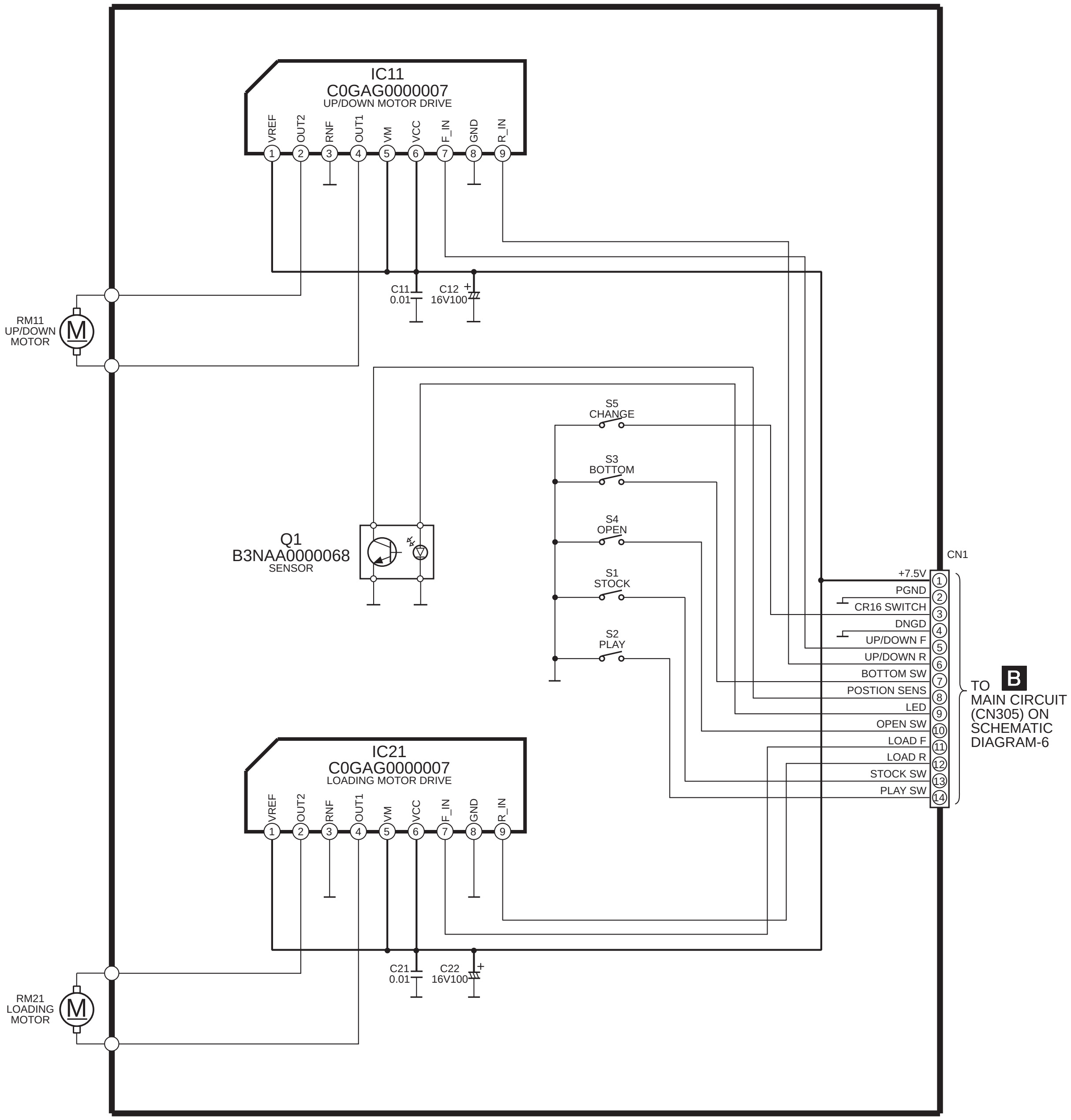
L SPEAKER TERMINAL CIRCUIT

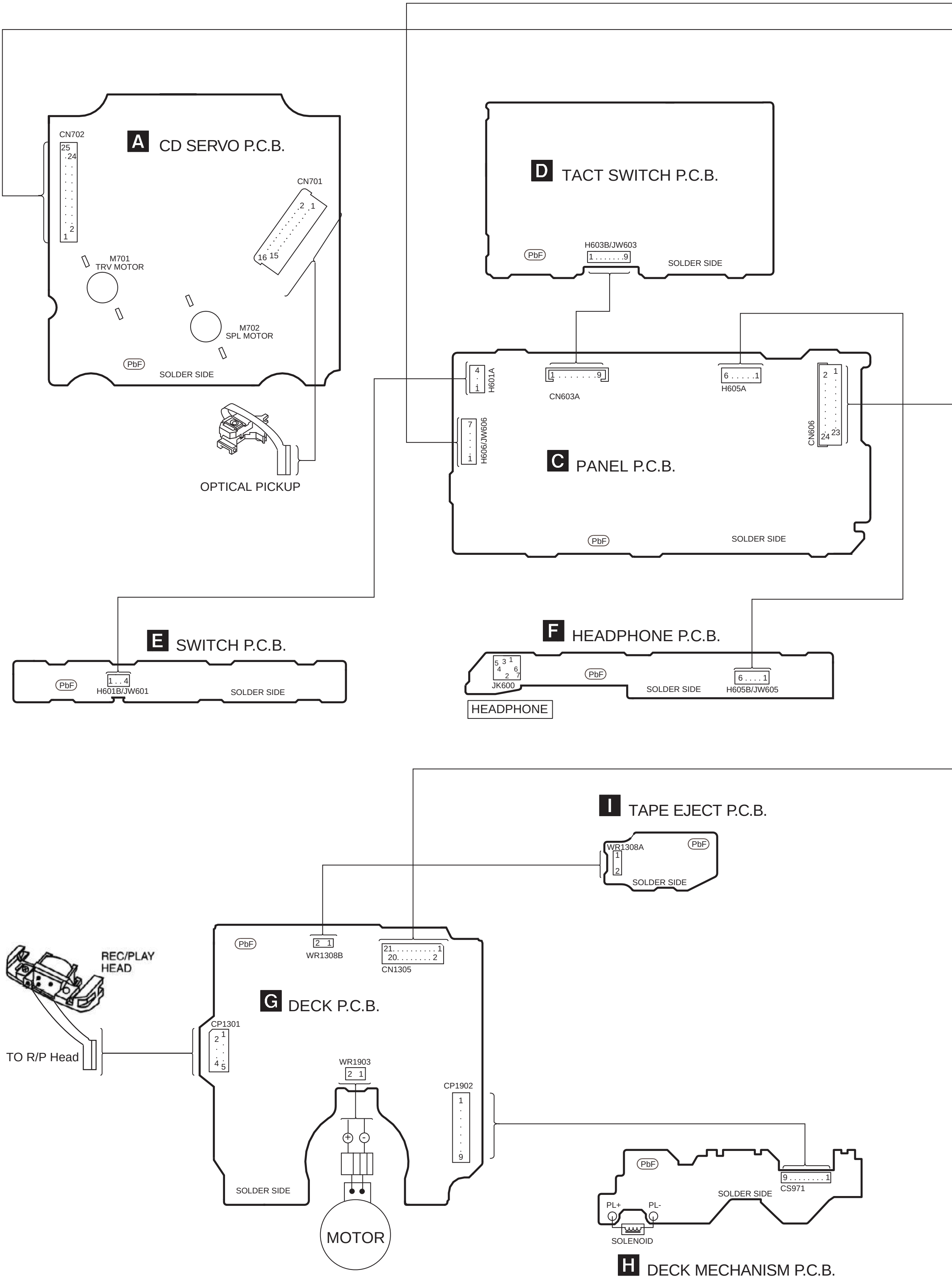

C437
0.1
C441
0.1
C236
0.1
C241
0.1
R230
10
H303/
JW303
TO J
POWER
CIRCUIT
(CN504) ON
SCHEMATIC
DIAGRAM-13
LO_R
LGND
LGND
HI_L
LO_L
RGND
RGND
HI_R
C237
0.1
C240
0.1
R231
10
E300
SNE1004-2
C436
0.1
C440
0.1
R431
10
L_GND
LO_R
R_GND
LO_L
HI_L
R_GND
HI_R
L_GND
JK301
SPEAKER

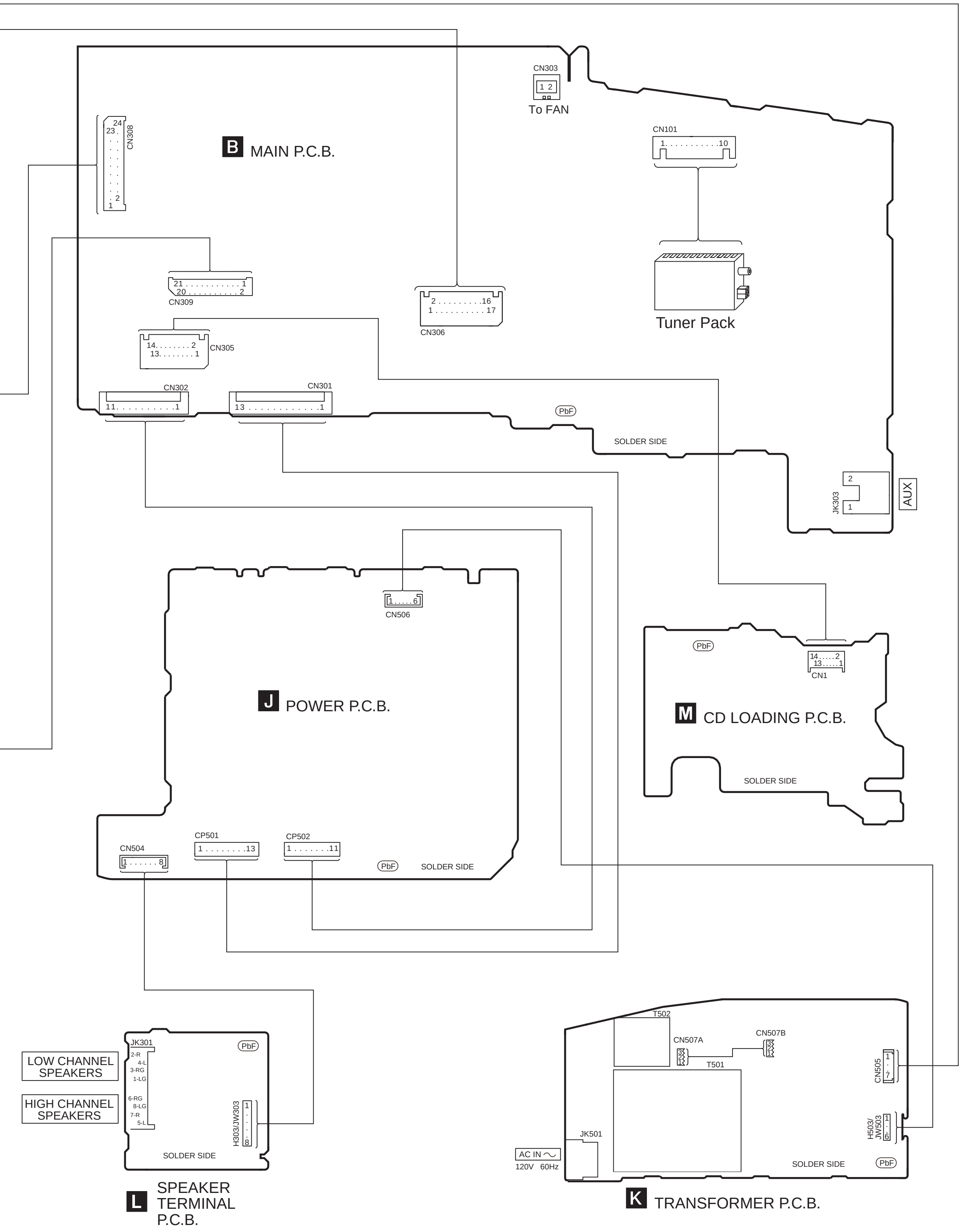
SCHEMATIC DIAGRAM-15

M CD LOADING CIRCUIT

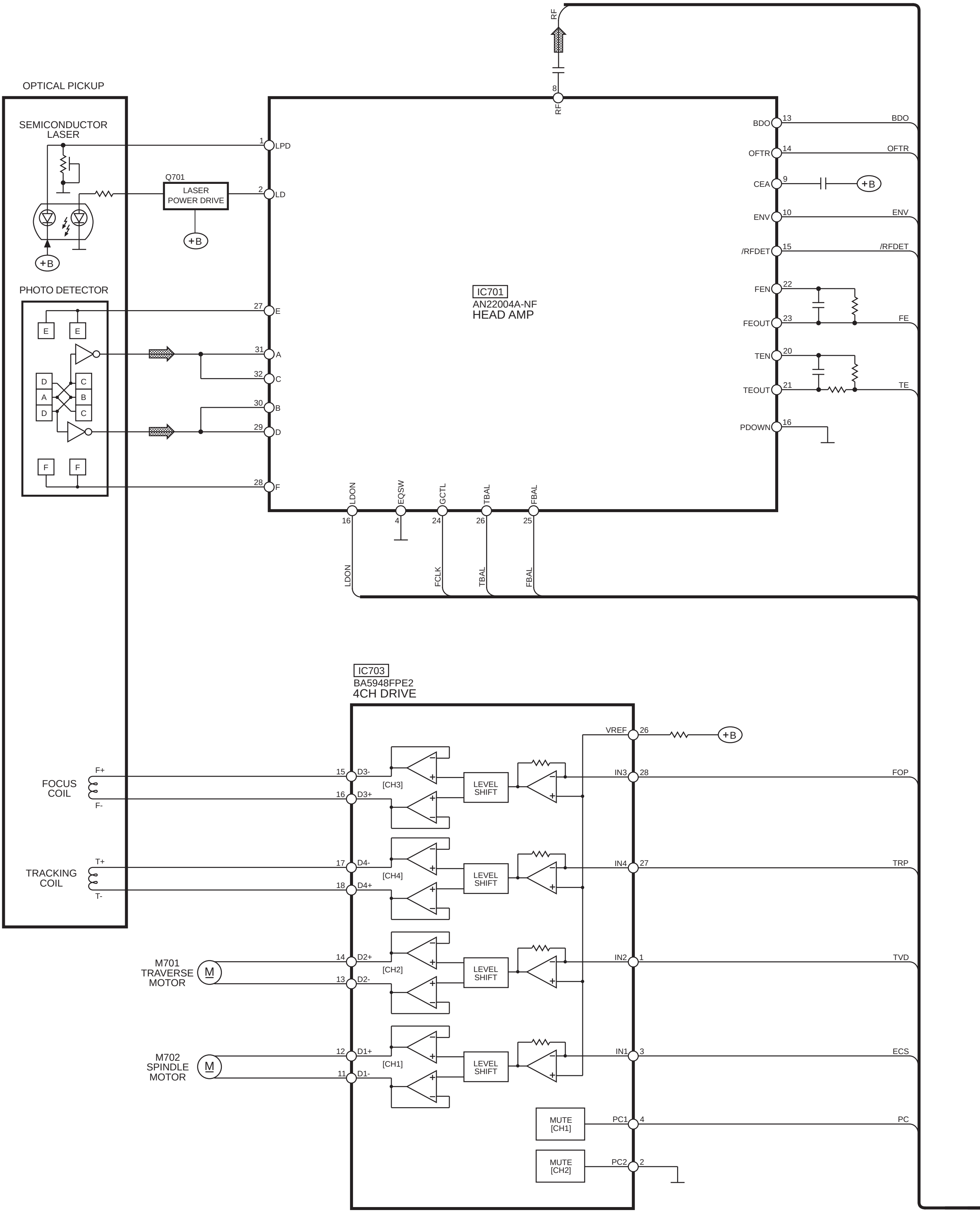
: +B SIGNAL LINE

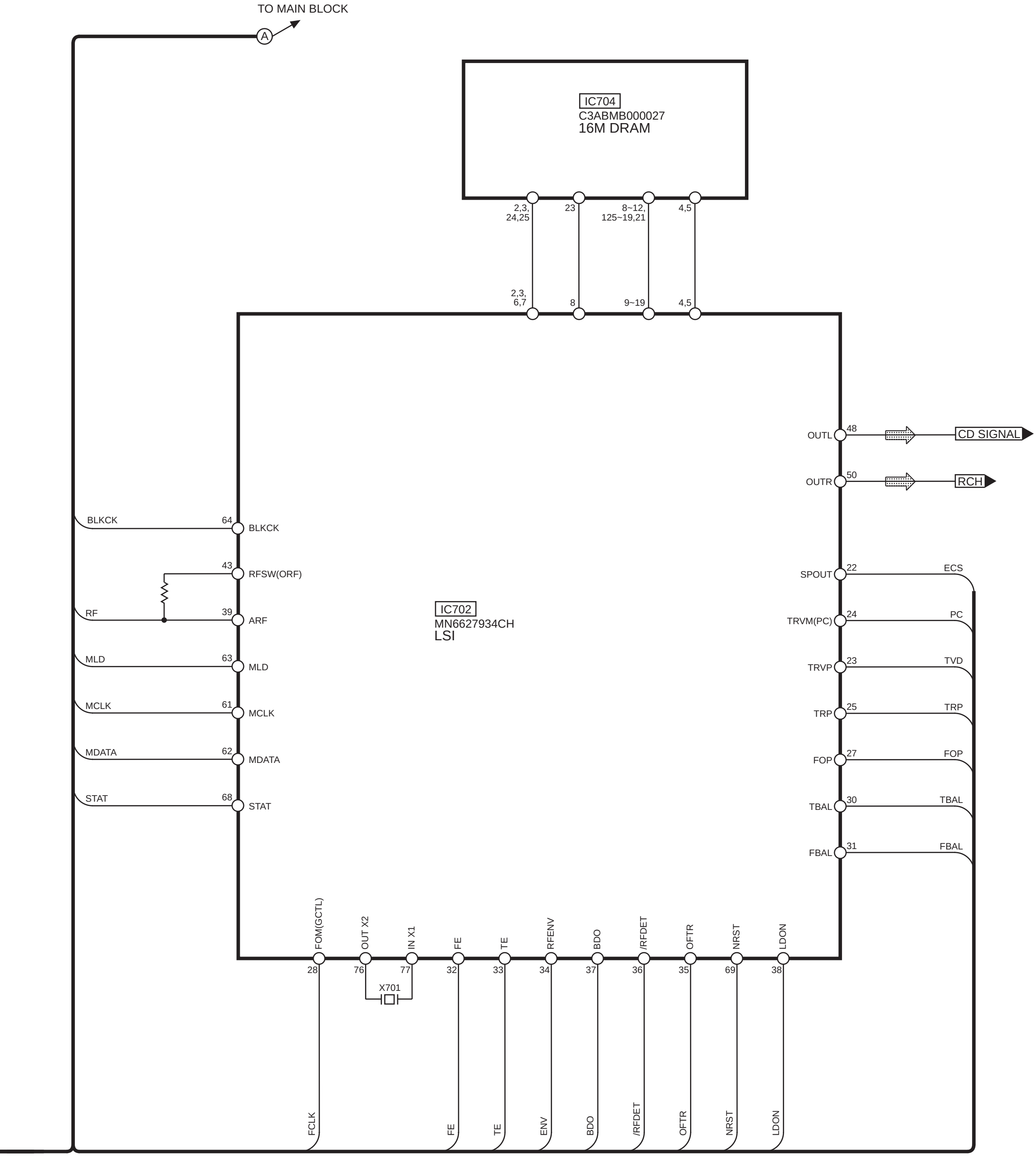

IC11
C0GAG0000007
UP/DOWN MOTOR DRIVE
VREF
OUT2
RNF
OUT1
VM
VCC
F_IN
GND
R_IN
1
2
3
4
5
6
7
8
9
C11
0.01
C12
16V100
+
RM11
UP/DOWN
MOTOR
M
S5
CHANGE
S3
BOTTOM
S4
OPEN
S1
STOCK
S2
PLAY
Q1
B3NAA0000068
SENSOR
CN1
+7.5V
1
PGND
2
CR16 SWITCH
3
DNGD
4
UP/DOWN F
5
UP/DOWN R
6
BOTTOM SW
7
POSTION SENS
8
LED
9
OPEN SW
10
LOAD F
11
LOAD R
12
STOCK SW
13
PLAY SW
14
TO B
MAIN CIRCUIT
(CN305) ON
SCHEMATIC
DIAGRAM-6
IC21
C0GAG0000007
LOADING MOTOR DRIVE
VREF
OUT2
RNF
OUT1
VM
VCC
F_IN
GND
R_IN
1
2
3
4
5
6
7
8
9
C21
0.01
C22
16V100
+
RM21
LOADING
MOTOR
M

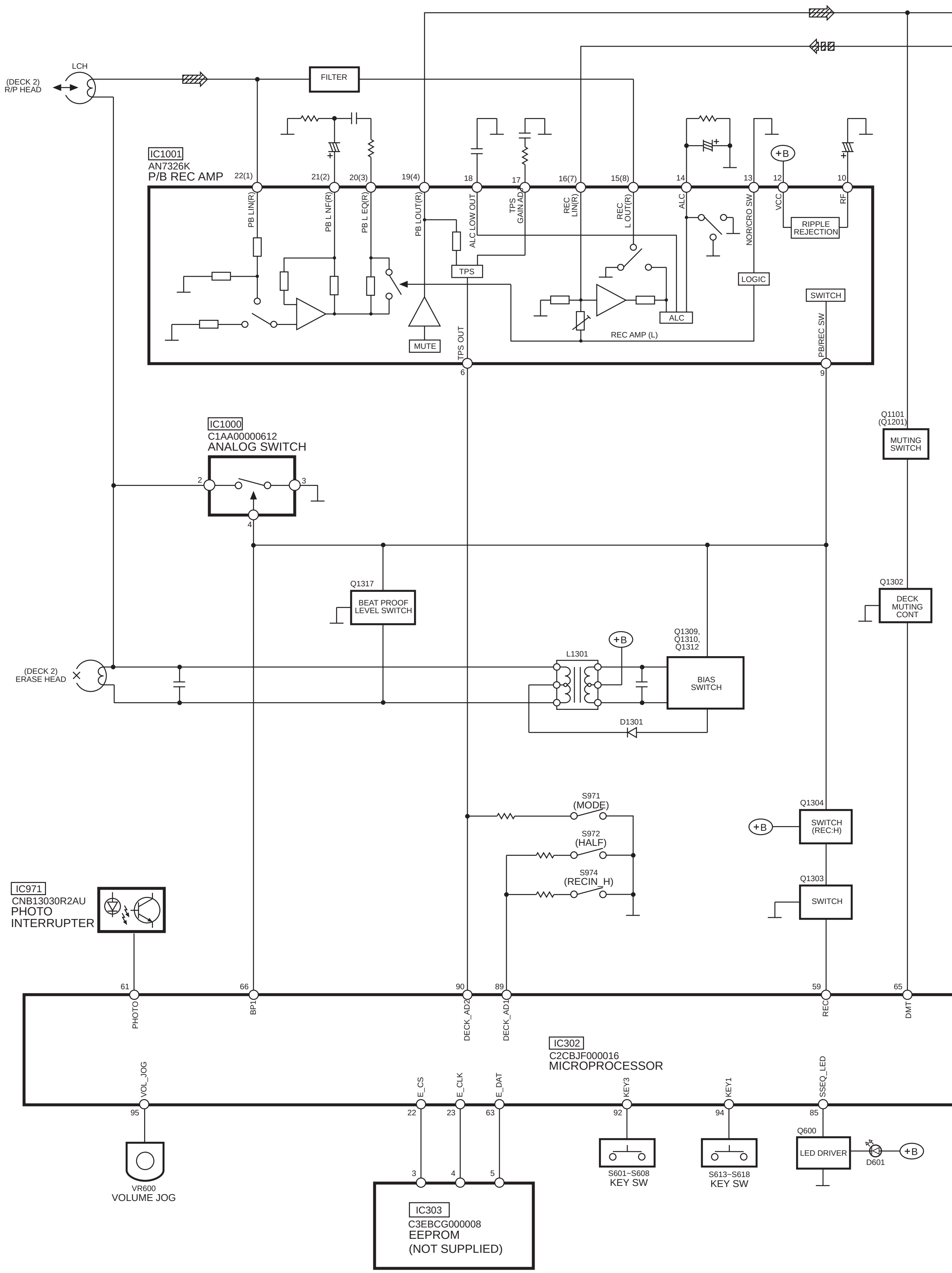

A
CD SERVO P.C.B.
CN702
25
24
2
1
CN701
2
1
16
15
M701
TRV MOTOR
M702
SPL MOTOR
PbF
SOLDER SIDE
OPTICAL PICKUP
D
TACT SWITCH P.C.B.
H603B/JW603
1 9
PbF
SOLDER SIDE
C
PANEL P.C.B.
4
1
H601A
7
1
H606/JW606
1 9
CN603A
6 1
H605A
2
1
24
23
CN606
PbF
SOLDER SIDE
E
SWITCH P.C.B.
PbF
1 . . 4
H601B/JW601
SOLDER SIDE
F
HEADPHONE P.C.B.
5
3
1
4
6
2
7
JK600
PbF
SOLDER SIDE
6 1
H605B/JW605
HEADPHONE
I
TAPE EJECT P.C.B.
WR1308A
1
2
PbF
SOLDER SIDE
G
DECK P.C.B.
PbF
2 1
WR1308B
21. 1
20. 2
CN1305
REC/PLAY HEAD
TO R/P Head
CP1301
2
1
4
5
WR1903
2 1
+
-
CP1902
1
9
SOLDER SIDE
MOTOR
H
DECK MECHANISM P.C.B.
PbF
9 1
CS971
SOLDER SIDE
PL+
PL-
SOLENOID

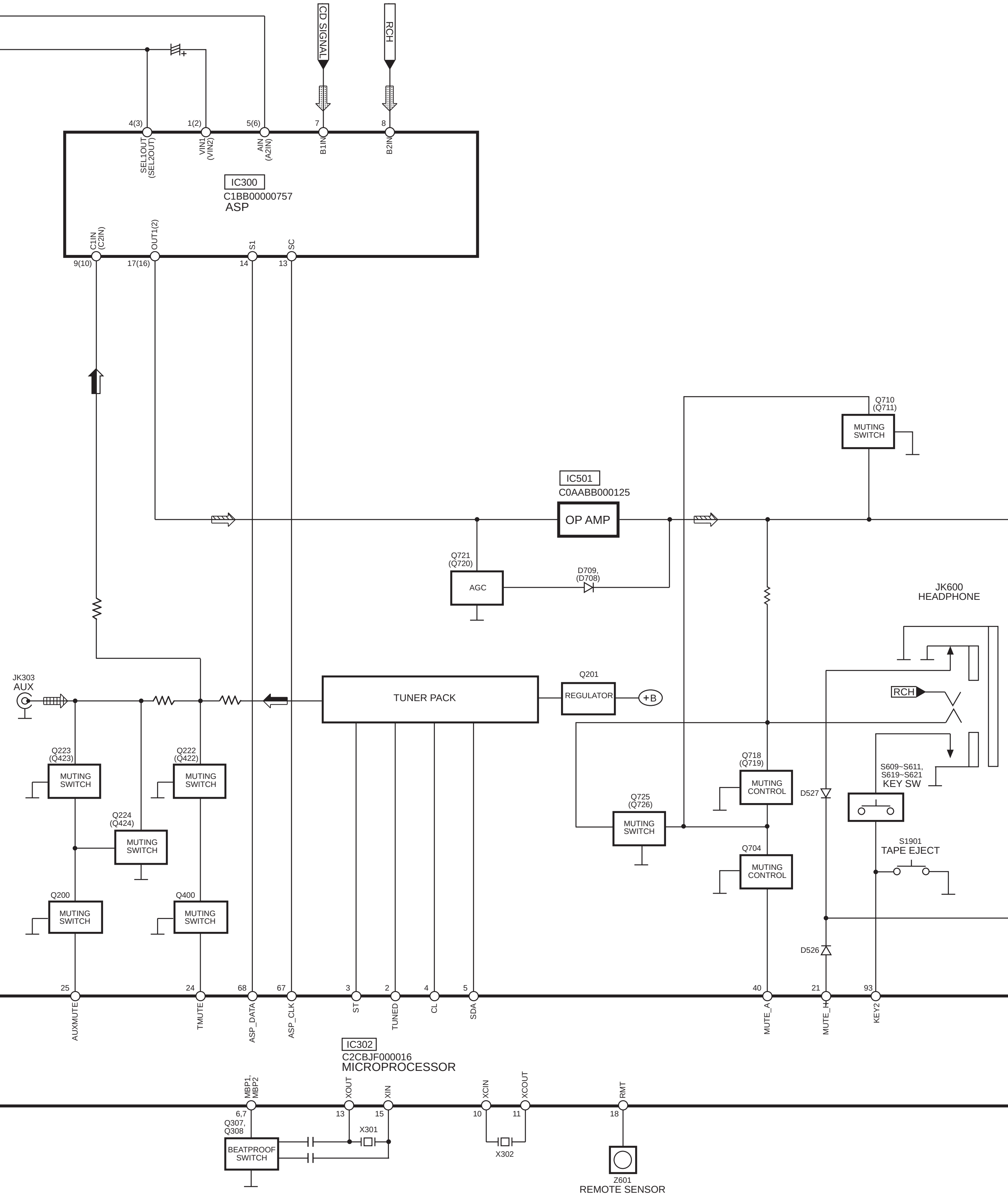


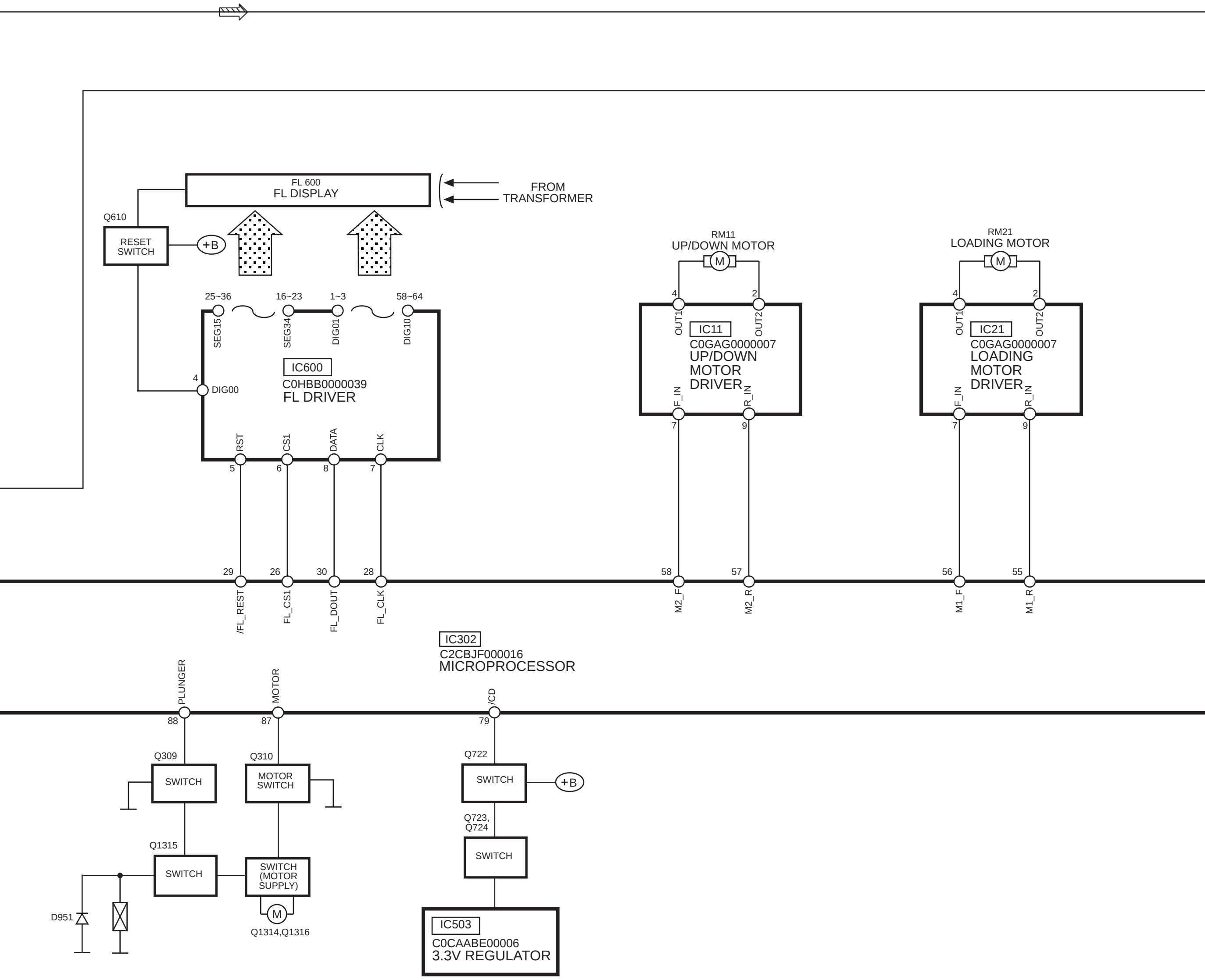
B MAIN P.C.B.
CN303
1 2
To FAN
CN308
24
23
2
1
CN101
1. 10
Tuner Pack
21 1
20 2
CN309
2 16
1 17
CN306
14. 2
13. 1
CN305
CN302
11. 1
CN301
13 1
PbF
SOLDER SIDE
JK303
2
1
AUX
J POWER P.C.B.
1 6
CN506
CN504
1 8
CP501
1 13
CP502
1 11
PbF
SOLDER SIDE
M CD LOADING P.C.B.
PbF
14. 2
13. 1
CN1
SOLDER SIDE
JK301
2-R
4-L
3-RG
1-LG
6-RG
8-LG
7-R
5-L
PbF
LOW CHANNEL SPEAKERS
HIGH CHANNEL SPEAKERS
H303/JW303
1
8
SOLDER SIDE
L SPEAKER TERMINAL P.C.B.
T502
CN507A
CN507B
T501
CN505
1
7
H503/JW503
1
6
JK501
AC IN ∼
120V 60Hz
SOLDER SIDE
PbF
K TRANSFORMER P.C.B.

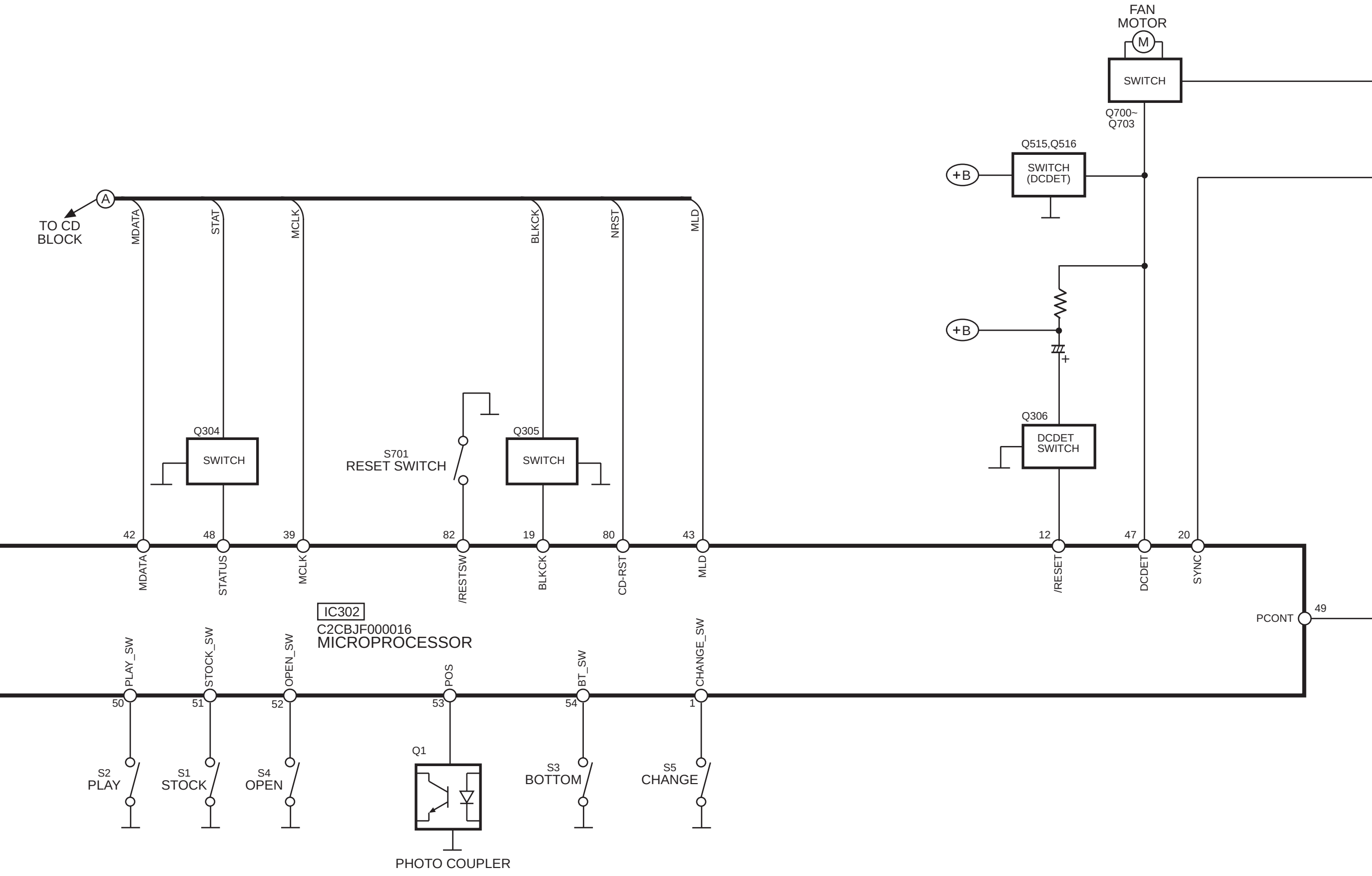

OPTICAL PICKUP
SEMICONDUCTOR LASER
+B
Q701
LASER POWER DRIVE
+B
PHOTO DETECTOR
E
E
D
A
D
C
B
C
F
F
RF
8
RF
1
LPD
2
LD
27
E
31
A
32
C
30
B
29
D
28
F
IC701
AN22004A-NF
HEAD AMP
BDO
13
BDO
OFTR
14
OFTR
CEA
9
+B
ENV
10
ENV
/RFDET
15
/RFDET
FEN
22
FEOUT
23
FE
TEN
20
TEOUT
21
TE
PDOWN
16
LDON
16
EQSW
4
GCTL
24
TBAL
26
FBAL
25
LDON
FCLK
TBAL
FBAL
IC703
BA5948FPE2
4CH DRIVE
VREF
26
+B
FOCUS COIL
F+
F-
15
D3-
16
D3+
[CH3]
LEVEL SHIFT
IN3
28
FOP
TRACKING COIL
T+
T-
17
D4-
18
D4+
[CH4]
LEVEL SHIFT
IN4
27
TRP
M701 TRAVERSE MOTOR
M
14
D2+
13
D2-
[CH2]
LEVEL SHIFT
IN2
1
TVD
M702 SPINDLE MOTOR
M
12
D1+
11
D1-
[CH1]
LEVEL SHIFT
IN1
3
ECS
MUTE [CH1]
PC1
4
PC
MUTE [CH2]
PC2
2


TO MAIN BLOCK
A
IC704
C3ABMB000027
16M DRAM
2,3,
24,25
23
8~12,
125~19,21
4,5
2,3,
6,7
8
9~19
4,5
IC702
MN6627934CH
LSI
OUTL
48
CD SIGNAL
OUTR
50
RCH
BLKCK
64
BLKCK
43
RFSW(ORF)
RF
39
ARF
MLD
63
MLD
MCLK
61
MCLK
MDATA
62
MDATA
STAT
68
STAT
SPOUT
22
ECS
TRVM(PC)
24
PC
TRVP
23
TVD
TRP
25
TRP
FOP
27
FOP
TBAL
30
TBAL
FBAL
31
FBAL
FOM(GCTL)
28
OUT X2
76
IN X1
77
X701
FE
32
TE
33
RFENV
34
BDO
37
/RFDET
36
OFTR
35
NRST
69
LDON
38
FCLK
FE
TE
ENV
BDO
/RFDET
OFTR
NRST
LDON


LCH
(DECK 2)
R/P HEAD
FILTER
IC1001
AN7326K
P/B REC AMP
22(1)
21(2)
20(3)
19(4)
18
17
16(7)
15(8)
14
13
12
10
PB LIN(R)
PB L NF(R)
PB L EQ(R)
PB LOUT(R)
ALC LOW OUT
TPS GAIN ADJ
REC LIN(R)
REC L OUT(R)
ALC
NOR/CRO SW
VCC
RF
+B
RIPPLE REJECTION
TPS
LOGIC
SWITCH
ALC
MUTE
REC AMP (L)
TPS OUT
PB/REC SW
6
9
IC1000
C1AA00000612
ANALOG SWITCH
2
3
4
Q1101
(Q1201)
MUTING SWITCH
Q1317
BEAT PROOF LEVEL SWITCH
Q1302
DECK MUTING CONT
L1301
+B
Q1309,
Q1310,
Q1312
BIAS SWITCH
(DECK 2)
ERASE HEAD
D1301
S971
(MODE)
S972
(HALF)
S974
(RECIN_H)
Q1304
+B
SWITCH (REC:H)
Q1303
SWITCH
IC971
CNB13030R2AU
PHOTO INTERRUPTER
61
66
90
89
59
65
PHOTO
BP1
DECK_AD2
DECK_AD1
REC
DMT
IC302
C2CBJF000016
MICROPROCESSOR
VOL_JOG
E_CS
E_CLK
E_DAT
KEY3
KEY1
SSEQ_LED
95
22
23
63
92
94
85
VR600
VOLUME JOG
3
4
5
IC303
C3EBCG000008
EEPROM
(NOT SUPPLIED)
S601~S608
KEY SW
S613~S618
KEY SW
Q600
LED DRIVER
D601
+B


CD SIGNAL
RCH
4(3)
1(2)
5(6)
7
8
SEL1OUT (SEL2OUT)
VIN1 (VIN2)
AIN (A2IN)
B1IN
B2IN
IC300
C1BB00000757
ASP
C1IN (C2IN)
OUT1(2)
S1
SC
9(10)
17(16)
14
13
Q710 (Q711)
MUTING SWITCH
IC501
C0AABB000125
OP AMP
Q721 (Q720)
AGC
D709, (D708)
JK600
HEADPHONE
JK303
AUX
TUNER PACK
Q201
REGULATOR
+B
RCH
Q223 (Q423)
MUTING SWITCH
Q222 (Q422)
MUTING SWITCH
Q224 (Q424)
MUTING SWITCH
Q200
MUTING SWITCH
Q400
MUTING SWITCH
Q718 (Q719)
MUTING CONTROL
Q725 (Q726)
MUTING SWITCH
Q704
MUTING CONTROL
S609~S611, S619~S621
KEY SW
D527
S1901
TAPE EJECT
D526
25
24
68
67
3
2
4
5
40
21
93
AUXMUTE
TMUTE
ASP_DATA
ASP_CLK
ST
TUNED
CL
SDA
MUTE_A
MUTE_H
KEY2
IC302
C2CBJF000016
MICROPROCESSOR
MBP1, MBP2
XOUT
XIN
XCIN
XCOUT
RMT
6,7
13
15
10
11
18
Q307, Q308
BEATPROOF SWITCH
X301
X302
Z601
REMOTE SENSOR


FL 600
FL DISPLAY
FROM
TRANSFORMER
Q610
RESET
SWITCH
+B
25~36
16~23
1~3
58~64
SEG15
SEG34
DIG01
DIG10
4
DIG00
IC600
C0HBB0000039
FL DRIVER
RST
CS1
DATA
CLK
5
6
8
7
RM11
UP/DOWN MOTOR
M
4
2
OUT1
OUT2
IC11
C0GAG0000007
UP/DOWN
MOTOR
DRIVER
F_IN
R_IN
7
9
RM21
LOADING MOTOR
M
4
2
OUT1
OUT2
IC21
C0GAG0000007
LOADING
MOTOR
DRIVER
F_IN
R_IN
7
9
29
26
30
28
58
57
56
55
/FL_REST
FL_CS1
FL_DOUT
FL_CLK
M2_F
M2_R
M1_F
M1_R
IC302
C2CBJF000016
MICROPROCESSOR
PLUNGER
MOTOR
/CD
88
87
79
Q309
SWITCH
Q310
MOTOR
SWITCH
Q722
SWITCH
+B
Q723,
Q724
SWITCH
Q1315
SWITCH
SWITCH
(MOTOR
SUPPLY)
M
Q1314,Q1316
D951
IC503
C0CAABE00006
3.3V REGULATOR

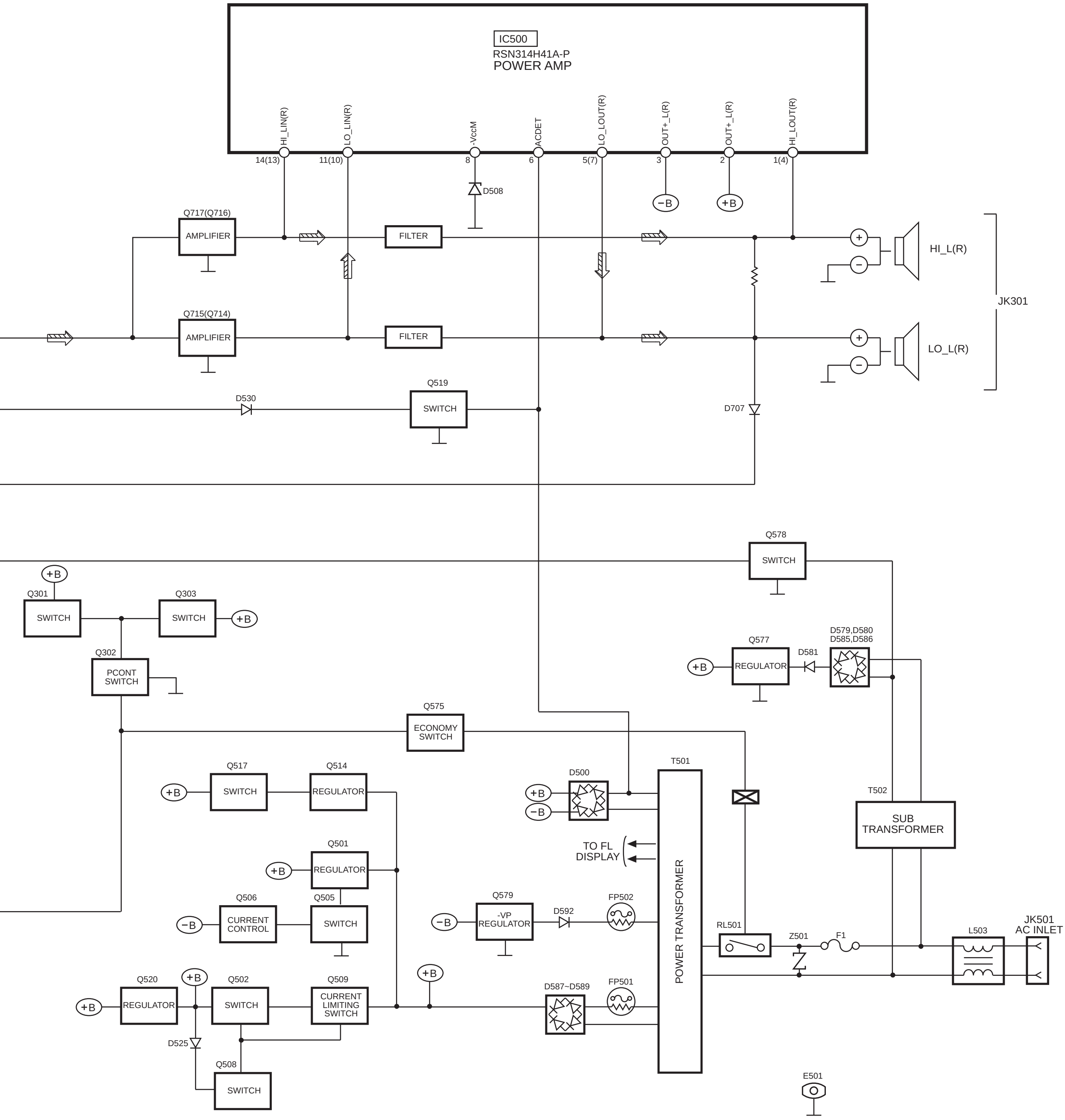

FAN
MOTOR
M
SWITCH
Q700~
Q703
Q515,Q516
+B
SWITCH
(DCDET)
+B
Q306
DCDET
SWITCH
A
TO CD
BLOCK
MDATA
STAT
MCLK
BLKCK
NRST
MLD
Q304
SWITCH
S701
RESET SWITCH
Q305
SWITCH
42
48
39
82
19
80
43
12
47
20
MDATA
STATUS
MCLK
/RESTSW
BLKCK
CD-RST
MLD
/RESET
DCDET
SYNC
IC302
C2CBJF000016
MICROPROCESSOR
PCONT
49
PLAY_SW
STOCK_SW
OPEN_SW
POS
BT_SW
CHANGE_SW
50
51
52
53
54
1
S2
PLAY
S1
STOCK
S4
OPEN
Q1
S3
BOTTOM
S5
CHANGE
PHOTO COUPLER

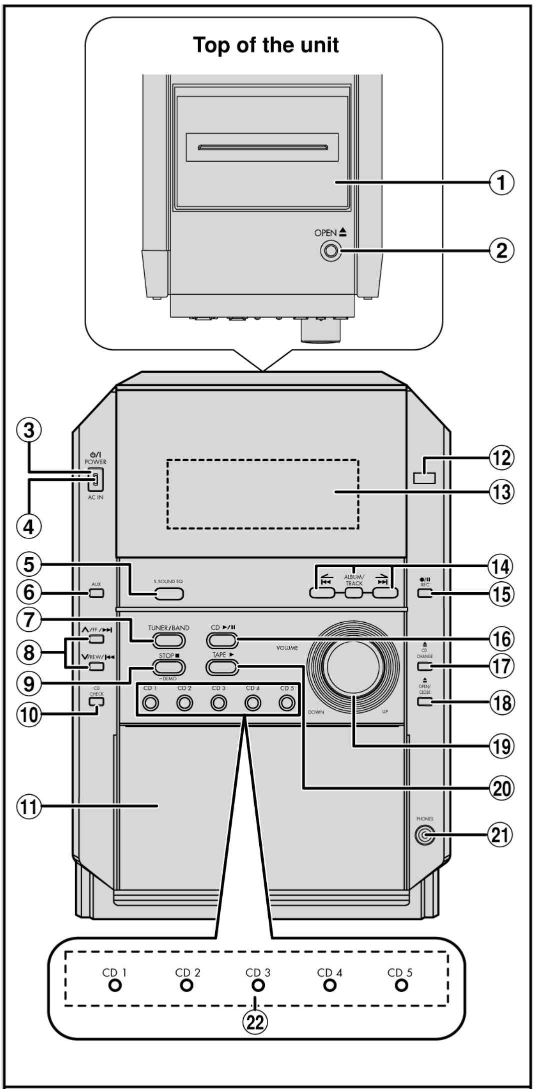
SIGNAL LINES

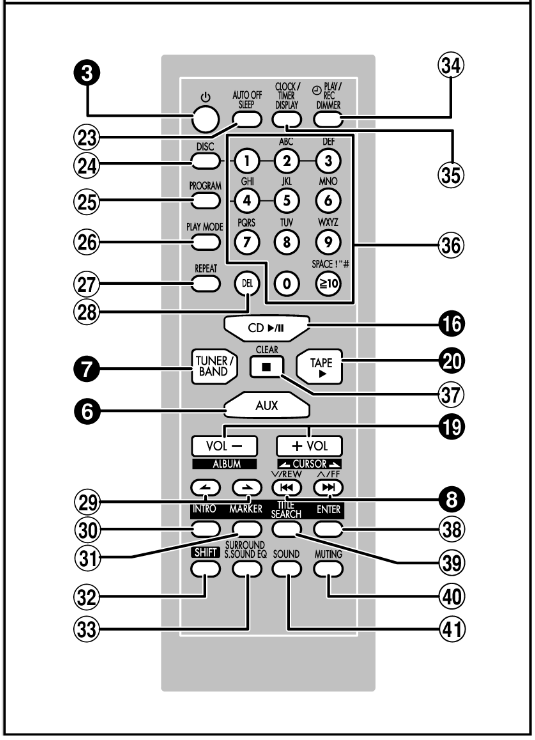
⇨ : MAIN SIGNAL LINE ⇨ : CD SIGNAL LINE ⇨ : TAPE PLAYBACK SIGNAL LINE

➡ : FM/AM SIGNAL LINE ⇨ : AUX SIGNAL LINE ⇨ : TAPE RECORD SIGNAL LINE

( ) Indicates Pin No. of Right Channel Note : Signal Lines are applicable to the Left Channel only.


IC500
RSN314H41A-P
POWER AMP
HI_LIN(R)
LO_LIN(R)
-VccM
ACDET
LO_LOUT(R)
OUT+_L(R)
OUT+_L(R)
HI_LOUT(R)
14(13)
11(10)
8
6
5(7)
3
2
1(4)
D508
−B
+B
Q717(Q716)
AMPLIFIER
FILTER
HI_L(R)
JK301
Q715(Q714)
AMPLIFIER
FILTER
LO_L(R)
D530
Q519
SWITCH
D707
Q578
SWITCH
+B
Q301
SWITCH
Q303
SWITCH
+B
Q302
PCONT
SWITCH
Q577
REGULATOR
+B
D581
D579,D580
D585,D586
Q575
ECONOMY
SWITCH
Q517
SWITCH
+B
Q514
REGULATOR
D500
+B
−B
T501
T502
SUB
TRANSFORMER
TO FL
DISPLAY
Q501
REGULATOR
+B
POWER TRANSFORMER
Q506
CURRENT
CONTROL
−B
Q505
SWITCH
Q579
-VP
REGULATOR
−B
D592
FP502
RL501
Z501
F1
L503
JK501
AC INLET
Q520
REGULATOR
+B
+B
Q502
SWITCH
Q509
CURRENT
LIMITING
SWITCH
+B
D587~D589
FP501
D525
Q508
SWITCH
E501


Top of the unit
OPEN ▲
①
②
③
⏻/I POWER
AC IN
④
⑤
S.SOUND EQ
⑥
AUX
⑦
TUNER/BAND
⑧
∧/FF/►►I
∨/REW/I◄◄
⑨
STOP ■
– DEMO
⑩
CD CHECK
⑪
⑫
⑬
⑭
ALBUM/TRACK
⑮
●/II REC
⑯
CD ►/II
VOLUME
⑰
CD CHANGE
⑱
OPEN/CLOSE
⑲
DOWN
UP
⑳
TAPE ►
㉑
PHONES
CD 1
CD 2
CD 3
CD 4
CD 5
㉒


❸
⏻
AUTO OFF SLEEP
CLOCK/TIMER DISPLAY
PLAY/REC DIMMER
㉞
㉓
㉔
DISC
ABC
DEF
1
2
3
㉟
㉕
PROGRAM
GHI
JKL
MNO
4
5
6
㉖
PLAY MODE
PQRS
TUV
WXYZ
7
8
9
㊱
SPACE !"#
㉗
REPEAT
DEL
0
≧10
㉘
CD ►/II
⓰
❼
TUNER/BAND
CLEAR
■
TAPE ►
⓴
㊲
❻
AUX
⓳
VOL –
+ VOL
ALBUM
CURSOR
∨/REW
∧/FF
㉙
❽
INTRO
MARKER
TITLE SEARCH
ENTER
㉚
㊳
㉛
㊴
SHIFT
SURROUND S.SOUND EQ
SOUND
MUTING
㉜
㊵
㉝
㊶

Front panel controls

Main unit

① **Cassette lid**

② **Cassette open button (OPEN ▲)**

③ **Standby/on switch (⏻/I POWER)**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

④ **AC supply indicator (AC IN)**
This indicator lights when the unit is connected to the AC outlet.

⑤ **Super sound EQ button (S.SOUND EQ)**

⑥ **Aux button (AUX)**

⑦ **Tuner/band select button (TUNER/BAND)**

⑧ **CD skip/search, tape fast-forward/rewind/TPS, tune/preset channel select, time adjust buttons [∨/REW/I◄◄] or [∧/FF/►►I]**

⑨ **Stop and demonstration button (STOP ■, –DEMO)**

⑩ **Checking CD position (CD CHECK)**

⑪ **CD trays**

⑫ **Remote control sensor**

⑬ **Display**

⑭ **Album/track selection button (⇆ ALBUM/TRACK ⇆)**

⑮ **Recording start/pause button (●/II REC)**

⑯ **CD play/pause button (CD ►/II)**

⑰ **CD change button (▲ CD CHANGE)**

⑱ **CD tray open/close button (▲ OPEN/CLOSE)**

⑲ **Volume control (VOLUME DOWN, UP)**

⑳ **Tape play button (TAPE ►)**

㉑ **Headphone jack (PHONES)**

㉒ **CD selection (CD 1~CD 5)**

Remote Control

Buttons such as ❸ function in exactly same way as the buttons on the main unit.

㉓ **Auto off/Sleep timer button (AUTO OFF, SLEEP)**

㉔ **Disc button (DISC)**

㉕ **CD Program, tuner preset button (PROGRAM)**

㉖ **Play mode select button (PLAY MODE)**
Use this for selecting CD play mode, tune mode and FM mode.

㉗ **Repeat button (REPEAT)**

㉘ **Delete button (DEL)**

㉙ **Album Selection button**

㉚ **Intro button (INTRO)**

㉛ **Marker memory/recall button (MARKER)**

㉜ **Shift button (SHIFT)**
To use functions labelled in orange ※ :
While pressing [SHIFT], press the corresponding button.

※ For buttons [AUTO OFF], [CLOCK/TIMER], [⏲PLAY/REC] and [SURROUND].

㉝ **Surround, Super sound EQ button (SURROUND, S.SOUND EQ)**

㉞ **Play timer/record timer/Dimmer button (⏲PLAY/REC, DIMMER)**

㉟ **Clock/timer/CD display button (CLOCK/TIMER, DISPLAY)**

㊱ **Numbered, character buttons (≧10, 1-9, 0, A-Z, SPACE!"#)**

㊲ **Stop/clear button (■ CLEAR)**

㊳ **Enter button (ENTER)**

㊴ **Title search mode select button (TITLE SEARCH)**

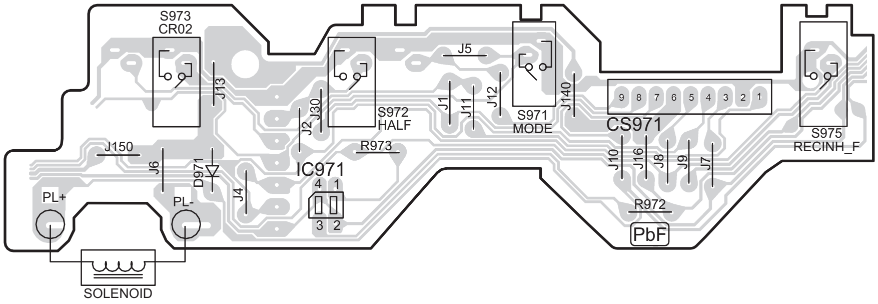
㊵ **Muting button (MUTING)**

㊶ **Preset EQ/Manual EQ button (SOUND)**

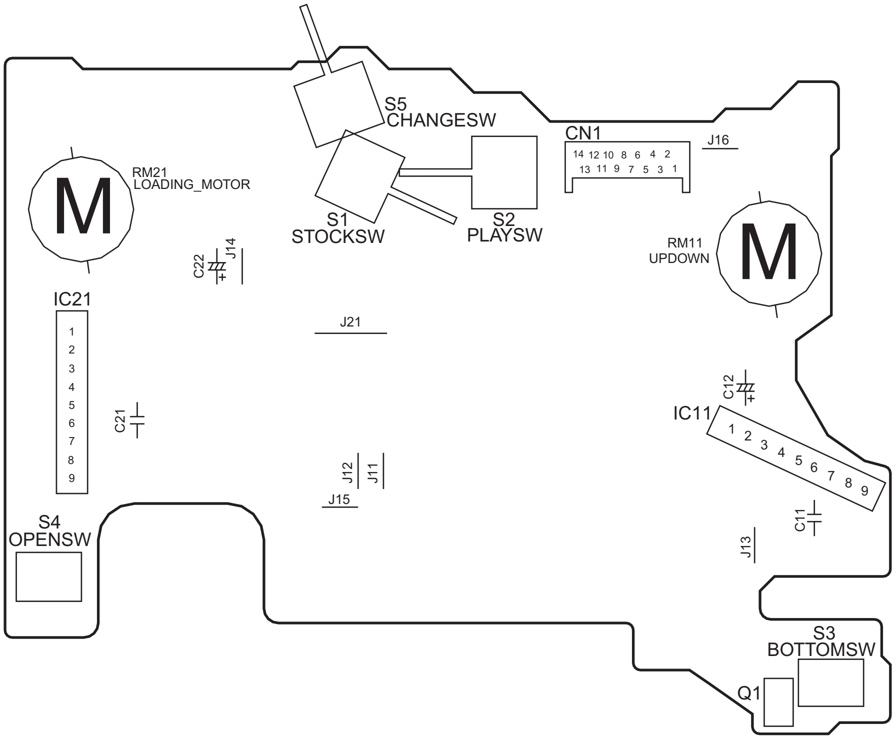
A B C D E F G

1 2 3 4 5 6 7 8 9

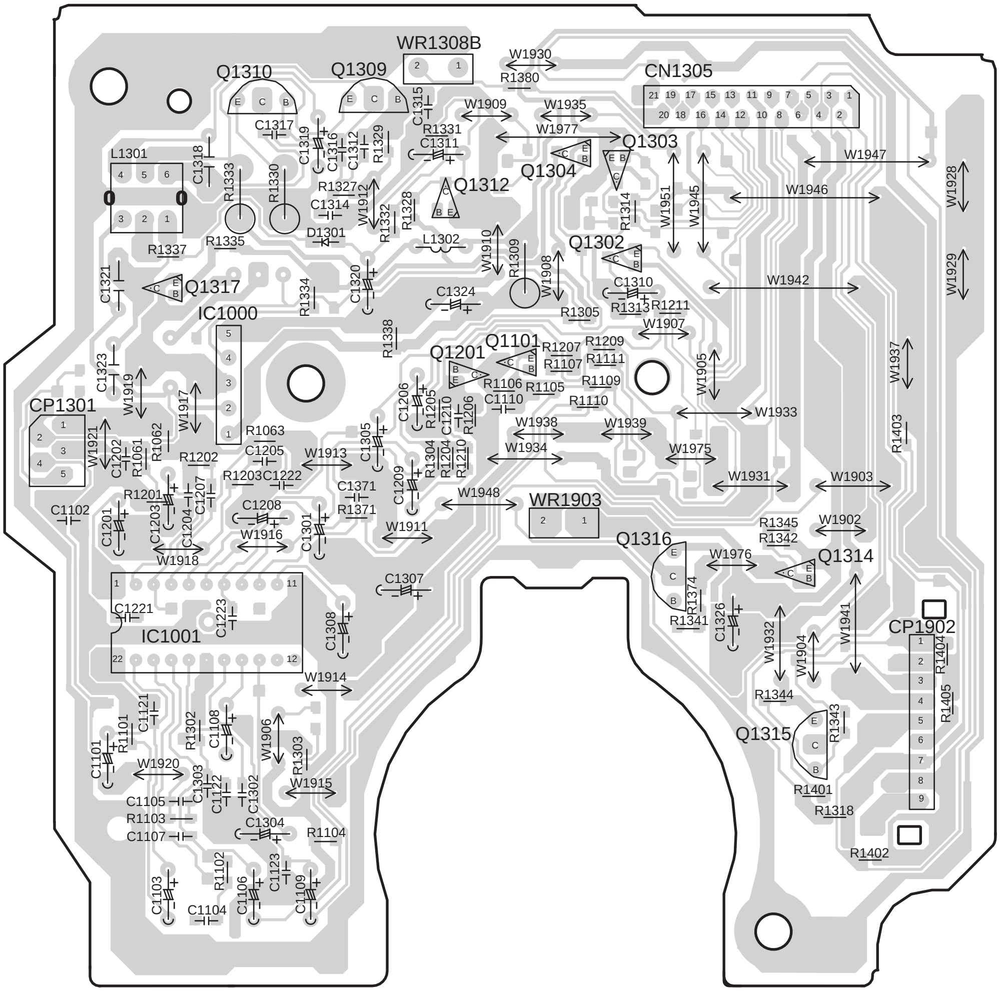
H DECK MECHANISM P.C.B (REPX0321H)


S973
CR02
J13
S972
HALF
J30
J2
J5
J1
J11
J12
S971
MODE
J140
9 8 7 6 5 4 3 2 1
CS971
S975
RECINH_F
J150
J6
D971
J4
IC971
4 1
3 2
R973
J10
J16
J8
J9
J7
R972
PbF
PL+
PL-
SOLENOID

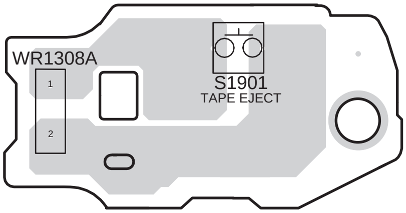
M CD LOADING P.C.B (REP3569A)


S5
CHANGESW
CN1
14 12 10 8 6 4 2
13 11 9 7 5 3 1
J16
M
RM21
LOADING_MOTOR
S1
STOCKSW
S2
PLAYSW
RM11
UPDOWN
M
C22
J14
IC21
1
2
3
4
5
6
7
8
9
J21
C21
C12
IC11
1 2 3 4 5 6 7 8 9
J12
J11
J15
C11
J13
S4
OPENSW
S3
BOTTOMSW
Q1

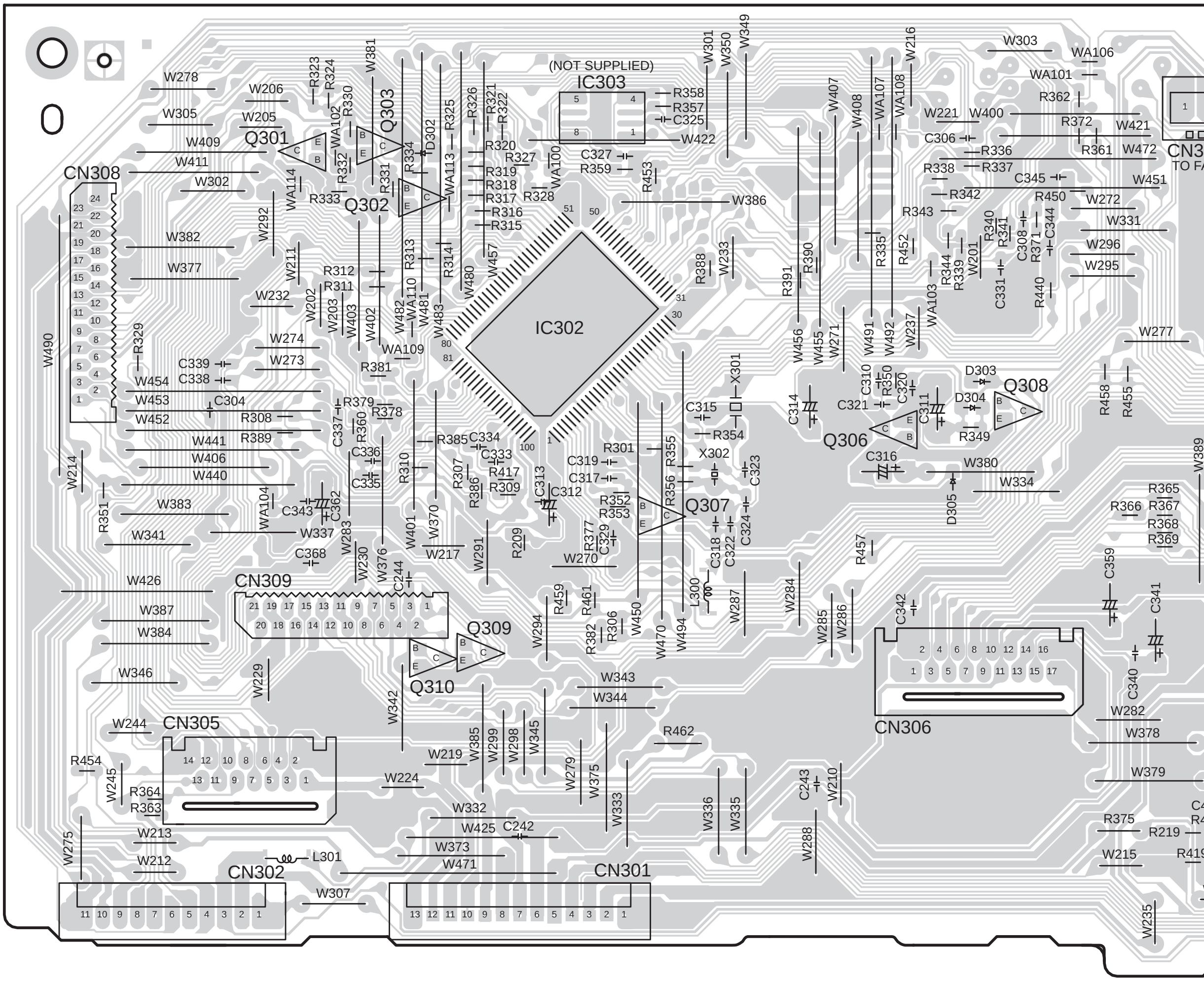
G DECK P.C.B (REPV0016B)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
WR1308B
Q1310
Q1309
W1930
R1380
CN1305
21 19 17 15 13 11 9 7 5 3 1
20 18 16 14 12 10 8 6 4 2
W1909
W1935
W1977
C1317
C1319
C1316
C1312
R1329
C1315
R1331
C1311
Q1303
Q1304
W1947
L1301
C1318
R1333
R1330
R1327
C1314
W1912
R1332
R1328
Q1312
R1314
W1951
W1945
W1946
W1928
D1301
L1302
W1910
R1309
R1335
R1337
Q1302
C1321
Q1317
R1334
C1320
C1324
W1908
C1310
R1313
R1211
W1942
W1929
R1305
IC1000
R1338
W1907
Q1201
Q1101
R1207
R1209
R1107
R1111
R1106
R1105
R1109
W1905
W1937
C1323
W1919
W1917
CP1301
C1206
R1205
C1210
R1206
C1110
R1110
W1933
R1063
W1921
C1202
R1061
R1062
C1205
W1913
C1305
R1304
R1204
R1210
W1938
W1939
W1934
W1975
R1403
R1202
R1201
R1203
C1222
C1371
C1209
W1931
W1903
C1102
C1201
C1203
C1204
C1207
C1208
R1371
W1948
WR1903
W1916
C1301
W1911
R1345
R1342
W1902
W1918
Q1316
W1976
Q1314
C1307
IC1001
C1221
C1223
C1308
R1374
R1341
C1326
W1932
W1904
W1941
CP1902
R1404
W1914
R1344
R1405
C1121
R1101
R1302
C1108
W1906
R1303
Q1315
R1343
C1101
W1920
W1915
C1105
C1303
C1122
C1302
R1401
R1318
R1103
C1304
R1104
C1107
R1402
C1103
R1102
C1106
C1123
C1109
C1104

I TAPE EJECT P.C.B (REPV0016B)


WR1308A
1
2
S1901
TAPE EJECT

B MAIN P.C.B (REPV0017A)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
IC302
IC303
(NOT SUPPLIED)
CN308
CN309
CN305
CN302
CN301
CN306
CN3
TO FA
Q301
Q302
Q303
Q306
Q307
Q308
Q309
Q310
X301
X302
L300
L301
D302
D303
D304
D305
W278
W305
W206
W205
W409
W411
W302
W382
W377
W490
W454
W453
W452
W441
W406
W440
W214
W383
W341
W426
W387
W384
W346
W244
W245
W213
W212
W275
W307
W292
W211
W232
W274
W273
W202
W203
W403
W402
W482
W481
W483
W480
W457
WA100
WA102
WA104
WA109
WA110
WA113
WA114
W381
W349
W350
W301
W386
W422
W233
W407
W408
WA107
WA108
W216
W303
WA106
WA101
W221
W400
W421
W472
W451
W272
W331
W296
W295
W277
W456
W455
W271
W491
W492
W237
WA103
W201
W337
W283
W230
W376
W401
W370
W217
W291
W270
W450
W470
W494
W287
W284
W285
W286
W380
W334
W389
W229
W342
W219
W224
W385
W299
W298
W345
W294
W343
W344
W279
W375
W333
W336
W335
W210
W288
W332
W425
W373
W471
W282
W378
W379
W215
W235
R323
R324
R330
R332
R331
R333
R334
R325
R326
R321
R322
R320
R327
R319
R318
R317
R316
R315
R328
R358
R357
R359
R453
R312
R311
R313
R314
R381
R379
R378
R360
R308
R389
R385
R310
R307
R386
R417
R309
R301
R355
R354
R356
R352
R353
R377
R209
R388
R391
R390
R335
R452
R344
R339
R340
R341
R371
R440
R362
R372
R361
R336
R337
R338
R342
R343
R450
R350
R349
R458
R455
R365
R366
R367
R368
R369
R457
R459
R461
R382
R306
R462
R329
R351
R454
R364
R363
R375
R219
R419
C327
C325
C339
C338
C304
C337
C336
C335
C334
C333
C343
C362
C368
C244
C313
C312
C319
C317
C329
C315
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C322
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C320
C311
C316
C306
C345
C308
C344
C331
C359
C341
C342
C340
C243
C242
C4